

=> fil reg  
 FILE 'REGISTRY' ENTERED AT 09:02:36 ON 08 APR 2003  
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Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 7 APR 2003 HIGHEST RN 502131-66-0  
 DICTIONARY FILE UPDATES: 7 APR 2003 HIGHEST RN 502131-66-0

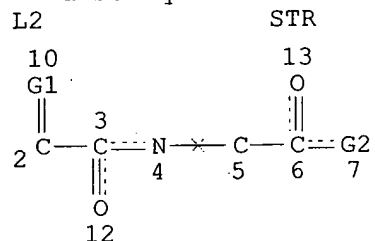
TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d sta que l4



*Notice - There is a (50%) overlap between  
 this case + 09/805249, same applicants  
 Again, answers saved if needed*

VAR G1=C/O  
 VAR G2=CH2/O/N  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE  
 L4 19991 SEA FILE=RE

100.0% PROCESSED 247016 ITERATIONS  
 SEARCH TIME: 00.00.02

19991 ANSWERS

=> d his

(FILE 'REGISTRY' ENTERED AT 08:45:22 ON 08 APR 2003)

DEL HIS  
 ACT VKIM805/A

L1 STR  
 L2 STR L1  
 L3 50 S L2

L4 19991 S L2 FUL  
SAV TEMP L4 VKIM873/A

FILE 'HCAPLUS' ENTERED AT 08:48:01 ON 08 APR 2003

L5 7372 S L4  
L6 4732 S L5 AND (PY<=1995 OR PRY<=1995 OR AY<=1995)  
L7 11 S L6 AND (STEINER J? OR HAMILTON G?)/AU

FILE 'REGISTRY' ENTERED AT 08:49:09 ON 08 APR 2003

L8 1 S ROTAMASE/CN  
SEL CHEM

FILE 'HCAPLUS' ENTERED AT 08:49:29 ON 08 APR 2003

L9 1391 S E1-E14  
L10 340 S PEPTIDYL PROLYL ISOMERASE  
L11 1391 S L9,L10  
E ROTAM  
L12 173 S E8-E10  
L13 1392 S L11,L12  
L14 21 S L6 AND L13  
L15 4908 S FKBP? OR FK506 OR FK 506  
L16 958 S IMMUNOPHILIN?  
L17 66 S L6 AND L15,L16  
L18 66 S L7,L14,L17  
L19 13 S L18 AND (NEUR? OR NERV? OR BRAIN OR SPINE OR SPINAL OR STROKE  
L20 13 S L7,L19  
L21 53 S L18 NOT L20  
L22 41 S L21 NOT P/DT  
L23 12 S L21 NOT L22  
L24 13 S L20 AND L5-L7,L9-L23  
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 09:01:11 ON 08 APR 2003

L25 416 S E1-E416  
L26 415 S L25 NOT L8  
SAV L26 VKIM873A/A

FILE 'REGISTRY' ENTERED AT 09:02:36 ON 08 APR 2003

=> d ide can l8

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS  
RN 95076-93-0 REGISTRY  
CN Isomerase, peptidylprolyl cis-trans- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN E.C. 5.2.1.8  
CN Parvulin  
CN Parvulin 10  
CN Peptide bond isomerase  
CN Peptidylproline cis-trans-isomerase  
CN Peptidylprolyl cis-trans-isomerase  
CN Peptidylprolyl isomerase  
CN Peptidylprolyl rotamase  
CN Proline isomerase  
CN Proline rotamase  
CN Prolyl cis/trans-isomerase  
CN Prolyl isomerase  
CN **Rotamase**  
MF Unspecified  
CI MAN  
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN,  
CHEMCATS, CIN, PROMT, TOXCENTER, USPAT2, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

976 REFERENCES IN FILE CA (1962 TO DATE)

22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

977 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:221796  
REFERENCE 2: 138:217002  
REFERENCE 3: 138:215353  
REFERENCE 4: 138:185019  
REFERENCE 5: 138:182861  
REFERENCE 6: 138:182059  
REFERENCE 7: 138:167992  
REFERENCE 8: 138:167734  
REFERENCE 9: 138:166388  
REFERENCE 10: 138:149411

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:02:55 ON 08 APR 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 8 Apr 2003 VOL 138 ISS 15

FILE LAST UPDATED: 7 Apr 2003 (20030407/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l24 all fhitr tot

L24 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:332684 HCAPLUS

DN 136:340999

TI Preparation of amino acid derivatives as **rotamase** enzyme activity inhibitors

IN **Steiner, Joseph P.; Hamilton, Gregory S.**

PA USA

SO U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U.S. Ser. No. 359,351.  
CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-225  
 ICS A61K031-16  
 NCL 514547000  
 CC 34-2 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 7, 15, 63

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002052410	A1	20020502	US 2001-805249	20010314 <--
	US 5614547	A	19970325	US 1995-479436	19950607 <--
	US 2002013344	A1	20020131	US 1995-551026	19951031 <--
	US 6509477	B1	20030121	US 1999-359351	19990721
PRAI	US 1995-479436	A1	19950607	<--	
	US 1995-551026	A2	19951031	<--	
	US 1996-693003	B1	19960806		
	US 1999-359351	A2	19990721		

OS MARPAT 136:340999

AB The invention relates to methods of using **neurotrophic** compds. having an affinity for **FKBP**-type **immunophilins** to stimulate or promote **neuronal** growth or regeneration and to prevent **neuronal** degeneration. Amino acid derivs.  
 $R_1C(:X)CON(J)CHKCO-Y(CH_2)_nCHZR_2$  [ $n = 0-3$ ; Y is  $CH_2$ , O, NH, or alkylimino; Z and  $R_2$  are independently Ar, or cycloalkyl, cycloalkenyl, or Ar-(un)substituted alkyl or alkenyl, or  $TCH:C(Q)CH_2-$ , where Q = H, alkyl or alkenyl; T is Ar or substituted cycloalkyl; Ar is an (un)substituted mono or bicyclic heterocyclic arom. ring;  $R_1$  is U, where U is H, (un)substituted alkyl, alkoxy, alkenyl, alkenyloxy, cycloalkyl or cycloalkenyl; X is O or CH-U, provided that if  $R_1$  is H, then X is CH-U or if X is O then  $R_1$  is U; J is H, alkyl or benzyl; K is alkyl, benzyl or cyclohexylethyl; or J and K may be taken together to form a 5-7 membered heterocyclic ring which may contain O, S, SO or  $SO_2$ ] or their pharmaceutically acceptable salts are claimed. Thus, 3-(3,4,5-trimethoxyphenyl)propyl (2S)-1-(3,3-dimethyl-1,2-dioxopentyl)-2-pyrrolidinecarboxylate was prepd. by esterification of the acid and showed  $K_i = 0.025 \mu M$  for inhibition of **rotamase** and  $ED_{50} = 80 \text{ nM}$  for **neurite** outgrowth in chick dorsal root ganglion (DRG) cultures.

ST **FKBP immunophilin rotamase** inhibitor  
 glyoxalylprolinate prepn; prolinate glyoxalyl prepn inhibitor  
**rotamase**; pipecolate glyoxalyl prepn inhibitor **rotamase**

IT **Immunophilins**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (FKBP (FK 506-binding protein); prepn. of  
 glyoxalylprolinate and -pipecolate derivs. as **rotamase**  
 inhibitors)

IT Anti-Alzheimer's agents

Anti-ischemic agents

**Antiparkinsonian** agents

(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT **Immunophilins**

**Neurotrophic** factors

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT Amino acids, preparation

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT **Brain, disease**

(stroke; prepn. of glyoxalylprolinate and -pipecolate  
 derivs. as **rotamase** inhibitors)

IT 95076-93-0, Rotamase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of glyoxalylprolinate and -pipecolate derivs. as  
 rotamase inhibitors)

IT 60336-68-7P 76391-12-3P 83079-95-2P  
 83079-96-3P 141083-86-5P 141084-02-8P  
 141084-12-0P 141084-13-1P 141084-14-2P  
 141084-34-6P 141084-35-7P 141084-39-1P  
 141084-41-5P 141084-42-6P 141084-63-1P  
 141097-91-8P 145912-40-9P 145912-57-8P  
 155404-00-5P 186268-50-8P 186268-51-9P  
 186268-52-0P 186268-53-1P 186268-55-3P  
 186268-56-4P 186268-58-6P 186268-63-3P  
 186268-69-9P 186452-06-2P 186452-07-3P  
 186452-08-4P 186452-09-5P 186834-74-2P  
 186834-75-3P 188614-85-9P 188614-86-0P  
 188614-93-9P 188614-99-5P 188615-02-3P  
 188615-03-4P 188615-04-5P 188615-05-6P  
 188615-14-7P 189328-04-9P 190444-03-2P  
 205388-68-7P 217308-44-6P 251949-17-4P  
 251949-25-4P 252002-68-9P 391669-36-6P  
 409366-63-8P 409366-64-9P 409366-65-0P  
 409366-66-1P 409366-67-2P 409366-68-3P  
 409366-69-4P 409366-70-7P 409366-71-8P  
 409366-72-9P 409366-73-0P 409366-74-1P  
 409366-75-2P 409366-76-3P 409366-77-4P 409366-78-5P  
 409366-79-6P 409366-80-9P 409366-81-0P  
 409366-82-1P 409366-83-2P 409366-84-3P  
 409366-85-4P 409366-86-5P 409366-87-6P  
 409366-88-7P 409366-89-8P 409366-90-1P  
 409366-91-2P 409366-92-3P 409366-93-4P  
 409366-94-5P 409366-95-6P 409366-96-7P  
 409366-97-8P 409366-98-9P 409366-99-0P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (prepn. of glyoxalylprolinate and -pipecolate derivs. as  
 rotamase inhibitors)

IT 60-12-8, Benzeneethanol 85-41-6, Phthalimide 86-81-7 91-01-0,  
 Diphenylmethanol 103-63-9 104-53-0, Benzenepropanal 120-57-0,  
 1,3-Benzodioxole-5-carboxaldehyde 122-97-4, 3-Phenyl-1-propanol  
 535-75-1, 2-Piperidinecarboxylic acid 677-22-5, tert-Butylmagnesium  
 chloride 2043-61-0, Cyclohexanecarboxaldehyde 2133-40-6, L-Proline  
 methyl ester hydrochloride 2637-34-5, 2-Mercaptopyridine 2859-67-8,  
 3-(3-Pyridyl)-1-propanol 3277-89-2, Phenethylmagnesium bromide  
 3360-41-6, 4-Phenyl-1-butanol 3840-31-1, 3,4,5-Trimethoxybenzyl alcohol  
 5381-92-0, 1,3-Diphenyl-2-propanol 5781-53-3, Methyl oxalyl chloride  
 6287-38-3 7417-19-8, Benzeneethanol, 2,5-dimethoxy- 10521-91-2,  
 5-Phenyl-1-pentanol 15862-72-3 17486-86-1, 1,5-Diphenyl-3-pentanol  
 28276-08-6, 1,1-Dimethylpropylmagnesium chloride 33538-81-7 64439-32-3  
 69610-41-9 88755-16-2, 3,4,5-Trimethoxybenzoylformic acid 114096-03-6  
 134804-92-5, 1,7-Diphenyl-4-heptanol 409367-00-6 409367-07-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of glyoxalylprolinate and -pipecolate derivs. as  
 rotamase inhibitors)

IT 1083-30-3P 4407-36-7P 14097-24-6P 20329-96-8P 26429-99-2P  
 29766-50-5P 30273-62-2P 40918-96-5P 53560-26-2P 58095-76-4P  
 68889-69-0P 82475-75-0P 89113-44-0P 98303-20-9P 139419-63-9P  
 145912-56-7P 148775-22-8P 186268-77-9P 186268-78-0P  
 186834-62-8P 194232-16-1P 201991-23-3P 205388-63-2P  
 409367-01-7P 409367-02-8P 409367-03-9P 409367-04-0P 409367-05-1P  
 409367-06-2P 409367-08-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)  
(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT 95076-93-0, **Rotamase**  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)  
RN 95076-93-0 HCAPLUS  
CN Isomerase, peptidylprolyl cis-trans- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L24 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS  
AN 2002:276521 HCAPLUS  
DN 136:310178  
TI Preparation of amino acid derivatives as **rotamase** enzyme  
activity inhibitors  
IN **Steiner, Joseph P.; Hamilton, Gregory S.**  
PA USA  
SO U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. Ser. No. 551,026.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM A61K038-05  
ICS A61K031-221; A61K031-16  
NCL 514019000  
CC 34-2 (Amino Acids, Peptides, and Proteins)  
Section cross-reference(s): 1, 7, 15, 63

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002042377	A1	20020411	US 2001-873298	20010605 <--
	US 5614547	A	19970325	US 1995-479436	19950607 <--
	US 2002013344	A1	20020131	US 1995-551026	19951031 <--
	US 6509477	B1	20030121	US 1999-359351	19990721
PRAI	US 1995-479436	A1	19950607	<--	
	US 1995-551026	A2	19951031	<--	
	US 1996-693003	B1	19960806		
	US 1999-359351	A2	19990721		

OS MARPAT 136:310178

AB The invention relates to methods of using **neurotrophic** compds.  
having an affinity for **FKBP**-type **immunophilins** to  
stimulate or promote **neuronal** growth or regeneration and to  
prevent **neuronal** degeneration. Amino acid derivs.  
R1C:(X)CON(J)CHKCO-Y-Z [Y is O, NH, or alkylimino; Z is H, CHL-Ar, alkyl,  
alkenyl, cycloalkyl, cycloalkenyl or Ar-substituted alkyl or alkenyl, or  
TCH:C(Q)CH(L)-, where L and Q are H, alkyl or alkenyl; T is Ar or  
substituted cyclohexyl; Ar is 1- or 2-naphthyl, 2- or 3-furyl, 2-thienyl,  
2-, 3- or 4-pyridyl, (un)substituted phenyl; R1 is U, where U is H,  
(un)substituted alkyl, alkoxy, alkenyl, alkenyloxy, cycloalkyl or  
cycloalkenyl; X is O or CH-U, provided that if R1 is H, then X is CH-U or  
if X is O then R1 is U; J is H, alkyl or benzyl; K is alkyl, benzyl or  
cyclohexylethyl; or J and K may be taken together to form a 5-7 membered  
heterocyclic ring which may contain O, S, SO or SO2] or their  
pharmaceutically acceptable salts are claimed. Thus, 3-(3,4,5-  
trimethoxyphenyl)propyl (2S)-1-(3,3-dimethyl-1,2-dioxopentyl)-2-  
pyrrolidinecarboxylate was prepd. by esterification of the acid and showed  
Ki = 0.025 .mu.M for inhibition of **rotamase** and ED50 = 80 nM for  
**neurite** outgrowth in chick dorsal root ganglion (DRG) cultures.

ST **FKBP immunophilin rotamase** inhibitor  
glyoxalylprolinate prepn; prolinate glyoxalyl prepn inhibitor  
**rotamase**; pipecolate glyoxalyl prepn inhibitor **rotamase**  
IT **Immunophilins**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (FKBP (FK 506-binding protein); prepn. of  
 glyoxalylprolinate and -pipecolinate derivs. as **rotamase**  
 inhibitors)

IT Anti-Alzheimer's agents  
 Anti-ischemic agents  
 Antiparkinsonian agents  
 (prepn. of glyoxalylprolinate and -pipecolinate derivs. as  
**rotamase** inhibitors)

IT Immunophilins  
 Neurotrophic factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of glyoxalylprolinate and -pipecolinate derivs. as  
**rotamase** inhibitors)

IT Amino acids, preparation  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (prepn. of glyoxalylprolinate and -pipecolinate derivs. as  
**rotamase** inhibitors)

IT Brain, disease  
 (stroke; prepn. of glyoxalylprolinate and -pipecolinate  
 derivs. as **rotamase** inhibitors)

IT 95076-93-0, Rotamase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of glyoxalylprolinate and -pipecolinate derivs. as  
**rotamase** inhibitors)

IT 60336-68-7P 76391-12-3P 83079-95-2P  
 83079-96-3P 141083-86-5P 141084-02-8P  
 141084-12-0P 141084-13-1P 141084-14-2P  
 141084-34-6P 141084-35-7P 141084-39-1P  
 141084-41-5P 141084-42-6P 141084-63-1P  
 141097-91-8P 145912-40-9P 145912-57-8P  
 155404-00-5P 186268-50-8P 186268-51-9P  
 186268-52-0P 186268-53-1P 186268-55-3P  
 186268-56-4P 186268-58-6P 186268-63-3P  
 186268-69-9P 186452-06-2P 186452-07-3P  
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 186834-75-3P 188614-85-9P 188614-86-0P  
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 205388-68-7P 217308-44-6P 251949-17-4P  
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 409366-63-8P 409366-64-9P 409366-65-0P  
 409366-66-1P 409366-67-2P 409366-68-3P  
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 409366-88-7P 409366-89-8P 409366-90-1P  
 409366-91-2P 409366-92-3P 409366-93-4P  
 409366-94-5P 409366-95-6P 409366-96-7P  
 409366-97-8P 409366-98-9P 409366-99-0P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (prepn. of glyoxalylprolinate and -pipecolinate derivs. as  
**rotamase** inhibitors)

IT 60-12-8, Benzeneethanol 85-41-6, Phthalimide 86-81-7,  
 3,4,5-Trimethoxybenzaldehyde 91-01-0, Diphenylmethanol 100-52-7,

Benzaldehyde, reactions 103-63-9, Phenethyl bromide 104-53-0,  
 Benzenepropanal 122-97-4, 3-Phenyl-1-propanol 535-75-1,  
 2-Piperidinecarboxylic acid 677-22-5, tert-Butylmagnesium chloride  
 2133-40-6, L-Proline methyl ester hydrochloride 2637-34-5,  
 2-Mercaptopyridine 2859-67-8, 3-(3-Pyridyl)-1-propanol 3277-89-2,  
 Phenethylmagnesium bromide 3360-41-6, 4-Phenyl-1-butanol 3840-31-1,  
 3,4,5-Trimethoxybenzyl alcohol 5381-92-0, 1,3-Diphenyl-2-propanol  
 5781-53-3, Methyl oxalyl chloride 6287-38-3, 3,4-Dichlorobenzaldehyde  
 7417-19-8, Benzeneethanol, 2,5-dimethoxy- 10521-91-2,  
 5-Phenyl-1-pentanol 15862-72-3 17486-86-1, 1,5-Diphenyl-3-pentanol  
 28276-08-6, 1,1-Dimethylpropylmagnesium chloride 33538-81-7 64439-32-3  
 69610-41-9 88755-16-2, 3,4,5-Trimethoxybenzoylformic acid 114096-03-6  
 134804-92-5, 1,7-Diphenyl-4-heptanol 409367-00-6 409367-07-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT 1083-30-3P 4407-36-7P 14097-24-6P 20329-96-8P 26429-99-2P  
 29766-50-5P 30273-62-2P 53560-26-2P 68889-69-0P 82475-75-0P  
 89113-44-0P 98303-20-9P **139419-63-9P** 145912-56-7P  
 148775-22-8P **186268-77-9P** **186268-78-0P**  
**186834-62-8P** **194232-16-1P** 201991-23-3P 205388-63-2P  
 409367-01-7P 409367-02-8P 409367-03-9P 409367-04-0P 409367-05-1P  
 409367-06-2P 409367-08-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

IT **95076-93-0, Rotamase**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of glyoxalylprolinate and -pipecolate derivs. as  
**rotamase** inhibitors)

RN 95076-93-0 HCAPLUS

CN Isomerase, peptidylprolyl cis-trans- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L24 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:687445 HCAPLUS

DN 135:236450

TI Prolyl ester compound inhibitors of **rotamase** activity, their  
 preparation, and their use

IN **Hamilton, Gregory S.; Steiner, Joseph P.**

PA GPI NIL Holdings, Inc., USA

SO U.S., 20 pp., Cont.-in-part of U. S. 693,003.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K031-401

NCL 514423000

CC 1-11 (Pharmacology)

Section cross-reference(s): 34

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6291510	B1	20010918	US 1998-73962	19980507 <--
	US 5614547	A	19970325	US 1995-479436	19950607 <--
PRAI	US 1995-479436	A1	19950607	<--	
	US 1996-693003	A2	19960806		

OS MARPAT 135:236450

AB The invention provides **neurotrophic** compds. having an affinity  
 for **FKBP**-type **immunophilins**, their prepn., and their  
 use as inhibitors of the enzyme activity assocd. with **immunophilin**  
 proteins, and particularly inhibitors of **peptidyl-prolyl**



**isomerase** or **rotamase** enzyme activity. The compds. of the invention may be used in the treatment of **neurol.** disorders, the prevention of **neurodegeneration**, and the promotion of **neuronal** regeneration and growth.

- ST prolyl ester deriv prepn **neurotrophic** compd; **neurol** disorder **neurodegeneration** prolyl ester deriv; **neuron** regeneration growth prolyl ester deriv
- IT. Proteins, specific or class  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (FKBP (FK 506-binding protein); prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT **Nerve**  
 (degeneration; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT **Nervous system**  
 (disease; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT Regeneration, animal  
 (**nerve**; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT Cytoprotective agents  
 (**neuroprotectants**; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT Axon  
 (outgrowth; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT **Nervous system agents**  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT **Neurotrophic factors**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT **Nerve**  
 (regeneration; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT 102-04-5P, 1,3-Diphenylpropanone 14097-24-6P, 1,3-Diphenyl-1-propanol 20329-96-8P 186268-77-9P 186268-78-0P 207444-86-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reaction; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT 186268-50-8P 186268-51-9P 186268-52-0P 186268-53-1P 186268-54-2P 186268-55-3P 186268-56-4P 186268-71-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT 147-85-3D, Proline, derivs.  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)
- IT 95076-93-0, **Rotamase**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)

IT 4407-36-7P 7031-03-0P, 1,3-Benzodioxole-5-propanol 26429-99-2P  
 30273-62-2P 40918-96-5P 53560-26-2P 82475-75-0P 101023-16-9P  
 148775-22-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)

IT 86-81-7 100-52-7, Benzaldehyde, reactions 103-63-9,  
 2-(Bromoethyl)benzene 122-97-4, 3-Phenyl-1-propanol 2133-40-6,  
 L-Proline methyl ester hydrochloride 2605-67-6 3182-93-2,  
 L-Phenylalanine ethyl ester hydrochloride 5781-53-3, Methyl oxalyl  
 chloride 28276-08-6, 1,1-Dimethylpropylmagnesium chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction; prolyl ester compd. inhibitors of **rotamase** activity, prepn., and use)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

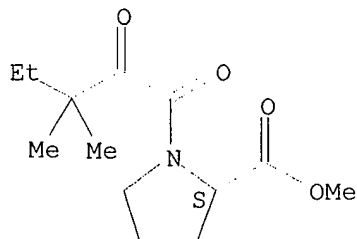
- (1) Anon; WO 9641609 1996 HCAPLUS
- (2) Armistead; US 5192773 1993 HCAPLUS
- (3) Armistead; US 5330993 1994 HCAPLUS
- (4) Armistead; US 6037370 2000 HCAPLUS
- (5) Birkenshaw; Bioorganic & Medicinal Chemistry Letters 1994, V4(21), P2501
- (6) Caffrey; Bioorganic & Medicinal Chemistry Letters 1994, V4(21), P2507  
 HCAPLUS
- (7) Connell; US 5385918 1995 HCAPLUS
- (8) Hamilton; US 5614547 1997 HCAPLUS
- (9) Hamilton; US 5721256 1998 HCAPLUS
- (10) Hamilton; US 5786378 1998 HCAPLUS
- (11) Hamilton; US 5795908 1998 HCAPLUS
- (12) Hauske; J Med Chem 1992, V35, P4284 HCAPLUS
- (13) Holt; Bioorganic & Medical Chemistry Letters 1993, V3(10), P1977 HCAPLUS
- (14) Holt; Bioorganic & Medicinal Chemistry Letters 1994, V4(2), P315 HCAPLUS
- (15) Holt; J Am Chem Soc 1993, V115, P9925 HCAPLUS
- (16) Li; US 5801187 1998 HCAPLUS
- (17) Luengo; Bioorganic & Medicinal Chemistry Letters 1994, V4(2), P321 HCAPLUS
- (18) Snyder; Nature Medicine 1995, V1(1), P32 HCAPLUS
- (19) Steiner; US 5696135 1997 HCAPLUS
- (20) Steiner; US 5798355 1998 HCAPLUS
- (21) Steiner; US 5801197 1998 HCAPLUS
- (22) Stocks; Bioorganic & Medicinal Chemistry Letters 1994, V4(12), P1457  
 HCAPLUS
- (23) Teague; Bioorganic & Medical Chemistry Letters 1994, V4(13), P1581 HCAPLUS
- (24) Teague; Bioorganic & Medicinal Chemistry Letters 1993, V3(10), P1947  
 HCAPLUS
- (25) Wang; Bioorganic & Medicinal Chemistry Letters 1994, V4(9), P1161 HCAPLUS
- (26) Yamashita; Bioorganic & Medicinal Chemistry Letters 1994, V4(2), P325  
 HCAPLUS

IT 186268-77-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and reaction; prolyl ester compd. inhibitors of  
**rotamase** activity, prepn., and use)

RN 186268-77-9 HCAPLUS

CN L-Proline, 1-(3,3-dimethyl-1,2-dioxopentyl)-, methyl ester (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:45148 HCAPLUS

DN 130:110640

TI Preparation of proline derivatives as inhibitors of **rotamase** enzyme activity

IN Hamilton, Gregory S.; Steiner, Joseph P.

PA GPI NIL Holdings, Inc., USA

SO U.S., 27 pp., Cont.-in-part of U.S. 5,614,547.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K031-40

ICS C07D207-16

NCL 514343000

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 7

FAN.CNT 8

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PI	US 5859031	A	19990112	US 1996-650461	19960521	<--
	US 5614547	A	19970325	US 1995-479436	19950607	<--
	CA 2206799	AA	19961219	CA 1996-2206799	19960605	<--
	WO 9640633	A1	19961219	WO 1996-US9701	19960605	<--
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	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
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	AU 703118	B2	19990318			
	GB 2305176	A1	19970402	GB 1996-24257	19960605	<--
	GB 2305176	B2	19991222			
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	CN 1187188	A	19980708	CN 1996-194554	19960605	<--
	GB 2324527	A1	19981028	GB 1998-15112	19960605	<--
	GB 2324527	B2	19991222			
	GB 2325230	A1	19981118	GB 1998-17938	19960605	<--
	BR 9608444	A	19990105	BR 1996-8444	19960605	<--
	GB 2332673	A1	19990630	GB 1999-5606	19960605	<--
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	ES 2131457	B1	20000401			
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	EP 992492	A1	20000412	EP 1999-126231	19960605	<--
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	JP 2000169444	A2	20000620	JP 1999-235727	19960605	<--

JP 2000204048	A2	20000725	JP 1999-43437	19960605	<--
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TW 453992	B	20010911	TW 1996-85113067	19961024	
ZA 9608984	A	19980625	ZA 1996-8984	19961025	<--
ZA 9608983	A	19980727	ZA 1996-8983	19961025	
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SE 9604098	A	19961208	SE 1996-4098	19961108	<--
US 5795908	A	19980818	US 1997-787161	19970123	<--
US 6140357	A	20001031	US 1997-833629	19970408	<--
NO 9704213	A	19971204	NO 1997-4213	19970912	<--
LV 11991	B	19980720	LV 1997-243	19971203	<--
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AU 9935063	A1	19990819	AU 1999-35063	19990615	<--
AU 733685	B2	20010524			
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DK 9901518	A	19991022	DK 1999-1518	19991022	<--
DK 9901519	A	19991022	DK 1999-1519	19991022	<--
US 6500959	B1	20021231	US 2000-605475	20000628	<--
PRAI US 1995-479436	A2	19950607	<--		
US 1996-650461	A	19960521			
AU 1996-61062	A3	19960605			
EP 1996-918384	A3	19960605			
GB 1996-24257	A3	19960605			
JP 1997-501958	A3	19960605			
WO 1996-US9701	W	19960605			
US 1997-833629	A1	19970408			
OS MARPAT 130:110640					
AB	<b>Neurotrophic N-glyoxyl prolyl esters R1COC(:X)-L-Pro-O-Z</b> [R1 = alkyl or alkenyl optionally substituted by cycloalkyl or aryl groups; X = O, S; Z = (un)substituted alkyl or alkenyl], which have an affinity for <b>FKBP-type immunophilins</b> , were prepd. for use as inhibitors of the enzyme activity assocd. with <b>immunophilin</b> proteins, in particular <b>peptidyl-prolyl isomerase (rotamase)</b> enzyme activity. Thus, 3-phenylpropyl (2S)-1-(3,3-dimethyl-1,2-dioxopentyl)-2-pyrrolidinecarboxylate was prepd. and showed apparent Ki value 42 for inhibition of <b>rotamase</b> activity.				
ST	glyoxylproline ester prepn inhibitor <b>rotamase</b> ; proline glyoxyl prepn inhibitor <b>rotamase</b>				
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (FKBP (FK 506-binding protein); prepn. of proline derivs. as inhibitors of <b>rotamase</b> enzyme activity)				
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (FKBP-12 (FK 506-binding protein, 12,000-mol.-wt.); prepn. of proline derivs. as inhibitors of <b>rotamase</b> enzyme activity)				
IT	<b>Nervous system</b> (amyotrophic lateral sclerosis; prepn. of proline derivs. as inhibitors of <b>rotamase</b> enzyme activity)				
IT	<b>Nerve</b> (degeneration; prepn. of proline derivs. as inhibitors of <b>rotamase</b> enzyme activity)				
IT	<b>Nervous system</b> (disease; prepn. of proline derivs. as inhibitors of <b>rotamase</b> enzyme activity)				
IT	<b>Nerve, disease</b> (peripheral neuropathy; prepn. of proline derivs. as				

- inhibitors of **rotamase** enzyme activity)
- IT **Alzheimer's disease**  
**Parkinson's disease**  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT **Growth factors, animal**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT **Immunophilins**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT 186268-50-8P 186268-51-9P 186268-52-0P  
 186268-53-1P 186268-54-2P 186268-56-4P  
 186268-57-5P 186268-58-6P 186268-63-3P  
 186268-64-4P 186268-65-5P 186268-66-6P  
 186268-67-7P 186268-68-8P 186452-05-1P  
 186452-06-2P 186452-07-3P 186452-08-4P  
 186452-09-5P 186452-10-8P 186452-11-9P  
 186452-12-0P 186452-13-1P 186452-14-2P  
 186452-15-3P 186452-16-4P 186452-17-5P  
 186452-18-6P 186452-19-7P 186452-20-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT 95076-93-0, **Rotamase**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT 86-81-7, 3,4,5-Trimethoxybenzaldehyde 122-97-4, 3-Phenyl-1-propanol  
 5781-53-3, Methyl oxalyl chloride 28276-08-6, 1,1-Dimethylpropylmagnesium chloride 79397-50-5, Proline methyl ester hydrochloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)
- IT 20329-96-8P, trans-Methyl 3,4,5-trimethoxycinnamate 30273-62-2P  
 53560-26-2P 139419-63-9P 186268-77-9P  
 186268-78-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)

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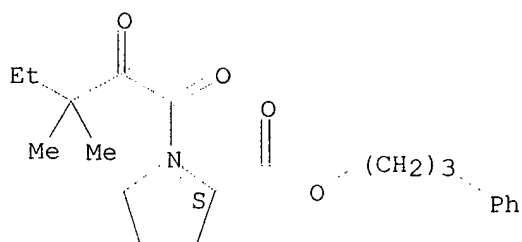
RE

- (1) Anon; EP 12401 1980 HCAPLUS
- (2) Anon; EP 48159 1982 HCAPLUS
- (3) Anon; EP 50800 1982 HCAPLUS
- (4) Anon; EP 88350 1983 HCAPLUS
- (5) Anon; EP 196841 1986 HCAPLUS
- (6) Anon; DE 3508251 1986 HCAPLUS
- (7) Anon; EP 260118 1988 HCAPLUS
- (8) Anon; EP 333174 1989 HCAPLUS
- (9) Anon; EP 352000 1990 HCAPLUS
- (10) Anon; EP 378318 1990 HCAPLUS
- (11) Anon; DE 3931051 1990 HCAPLUS
- (12) Anon; WO 9012805 1990 HCAPLUS

- (13) Anon; DE 4015255 1991 HCAPLUS  
(14) Anon; EP 405994 1991 HCAPLUS  
(15) Anon; EP 419049 1991 HCAPLUS  
(16) Anon; WO 9104985 1991 HCAPLUS  
(17) Anon; WO 9113088 1991 HCAPLUS  
(18) Anon; JP 04149166 1992 HCAPLUS  
(19) Anon; EP 0564924 A2 1992 HCAPLUS  
(20) Anon; GB 2247456 1992 HCAPLUS  
(21) Anon; EP 468339 1992 HCAPLUS  
(22) Anon; WO 9200278 1992 HCAPLUS  
(23) Anon; WO 9203472 1992 HCAPLUS  
(24) Anon; WO 9204370 1992 HCAPLUS  
(25) Anon; WO 9216501 1992 HCAPLUS  
(26) Anon; WO 9218478 1992 HCAPLUS  
(27) Anon; WO 9219593 1992 HCAPLUS  
(28) Anon; WO 9219745 1992 HCAPLUS  
(29) Anon; WO 9221313 1992 HCAPLUS  
(30) Anon; JP 05178824 1993 HCAPLUS  
(31) Anon; EP 572365 1993 HCAPLUS  
(32) Anon; ZA 9207782 1993 HCAPLUS  
(33) Anon; WO 9307269 1993 HCAPLUS  
(34) Anon; WO 9313066 1993 HCAPLUS  
(35) Anon; WO 9323548 1993 HCAPLUS  
(36) Anon; WO 9325546 1993 HCAPLUS  
(37) Anon; WO 9405639 1994 HCAPLUS  
(38) Anon; WO 9407858 1994 HCAPLUS  
(39) Anon; WO 9413629 1994 HCAPLUS  
(40) Anon; EP 652229 1995 HCAPLUS  
(41) Anon; WO 9512572 1995 HCAPLUS  
(42) Anon; WO 9524385 1995 HCAPLUS  
(43) Anon; WO 9526337 1995 HCAPLUS  
(44) Anon; WO 9535308 1995 HCAPLUS  
(45) Anon; WO 9535367 1995 HCAPLUS  
(46) Anon; WO 9606097 1996 HCAPLUS  
(47) Anon; WO 9614609 1996  
(48) Anon; WO 9615101 1996 HCAPLUS  
(49) Anon; WO 9617816 1996 HCAPLUS  
(50) Anon; WO 963318 1996  
(51) Anon; WO 9636630 1996 HCAPLUS  
(52) Armistead; US 5192773 1993 HCAPLUS  
(53) Armistead; US 5330993 1994 HCAPLUS  
(54) Armistead; US 5516797 1996 HCAPLUS  
(55) Burbaum; US 5319098 1994 HCAPLUS  
(56) Burbaum; US 5424454 1995 HCAPLUS  
(57) Connell; US 5385918 1995 HCAPLUS  
(58) Gavras; US 4574079 1986 HCAPLUS  
(59) Gold; US 4808573 1989 HCAPLUS  
(60) Gold; US 4818749 1989 HCAPLUS  
(61) Goulet; US 5147877 1992 HCAPLUS  
(62) Hackl; US 5414083 1995 HCAPLUS  
(63) Harris; US 4374829 1983 HCAPLUS  
(64) Hauske, J; J Med Chem 1992, V35, P4284 HCAPLUS  
(65) Holt, D; Bioorganic & Medical Chemistry Letters 1993, V3(10), P1977  
HCAPLUS  
(66) Krapcho; US 4310461 1982 HCAPLUS  
(67) Krapcho; US 4390695 1983 HCAPLUS  
(68) Krapcho; US 4578474 1986 HCAPLUS  
(69) Rinehart; US 5294603 1994 HCAPLUS  
(70) Schreiber; US 5447915 1995 HCAPLUS  
(71) Shanklin; US 4593102 1986 HCAPLUS  
(72) Shimano; US 4531964 1985 HCAPLUS  
(73) Skotnicki; US 5252579 1993 HCAPLUS  
(74) Takeuchi; US 5359138 1994 HCAPLUS

(75) Yamashita, D; Bioorganic & Medicinal Chemistry Letters 1994, V4(2), P325  
HCAPLUS  
(76) Zelle; US 5543423 1996 HCAPLUS  
IT 186268-50-8P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of proline derivs. as inhibitors of **rotamase** enzyme activity)  
RN 186268-50-8 HCAPLUS  
CN L-Proline, 1-(3,3-dimethyl-1,2-dioxopentyl)-, 3-phenylpropyl ester (9CI)  
(CA INDEX NAME)

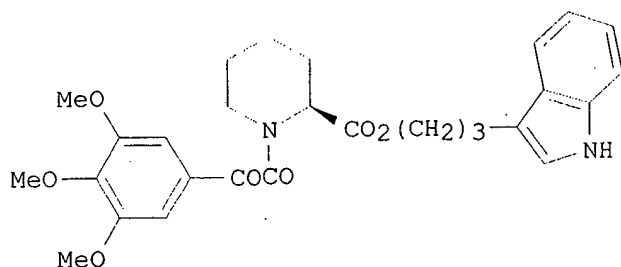
Absolute stereochemistry.



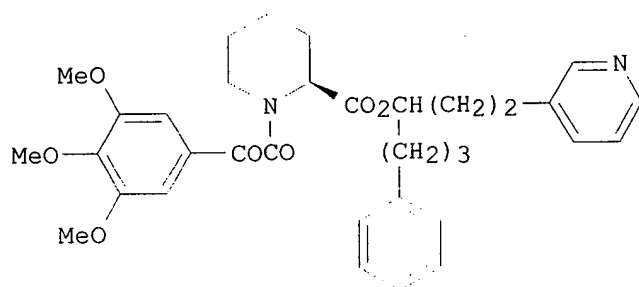
L24 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS  
AN 1998:599365 HCAPLUS  
DN 129:198015  
TI **Rotamase** enzyme activity inhibitors  
IN **Steiner, Joseph P.; Hamilton, Gregory S.**  
PA GPI Nil Holdings, Inc., USA  
SO U.S., 16 pp., Cont.-in-part of U. S. Ser. No. 551,026, abandoned.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM A61K031-445  
ICS A61K031-40; A61K031-22; A61K031-24  
NCL 514548000  
CC 1-11 (Pharmacology)  
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5801197	A	19980901	US 1996-645149	19960513 <--
	US 2002013344	A1	20020131	US 1995-551026	19951031 <--
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	WO 9716190	A1	19970509	WO 1996-US13624	19960826 <--
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	AU 713302	B2	19991125		
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	CN 1205635	A	19990120	CN 1996-199127	19960826 <--
	JP 11514643	T2	19991214	JP 1996-517308	19960826 <--
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LV 12102                      B      19981020                      LV 1998-85                      19980625 <--  
 PRAI US 1995-551026          B2    19951031      <--  
       US 1996-645149          A      19960513  
       WO 1996-US13624        W      19960826  
 OS      MARPAT 129:198015  
 GI



I



II

- AB This invention relates to the method of using specially formulated **neurotrophic** pipecolic acid deriv. compds. having an affinity for **FKBP**-type **immunophilins** as inhibitors of the enzyme activity assocd. with **immunophilin** proteins, and particularly inhibitors of **peptidyl-prolyl isomerase** or **rotamase** enzyme activity to stimulate or promote **neuronal** growth or regeneration. The stimulation of **neurite** outgrowth induced by a 300pM dose of I and 1 nM dose of II were demonstrated.  
 ST **rotamase** enzyme inhibitor pyrrolidinecarboxylate;  
**neurotrophic** pipecolic acid deriv  
 IT Proteins, specific or class  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (FKBP (FK 506-binding protein);  
**neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for stimulation of **neuron** growth)  
 IT **Immunophilins**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (FKBP-type; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for stimulation of **neuron** growth)  
 IT **Nervous system**  
 (amyotrophic lateral sclerosis; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for stimulation of **neuron** growth)  
 IT **Nerve**  
 (neuron, growth of; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for stimulation of



neuron growth)

IT Structure-activity relationship  
(**rotamase** inhibiting; **neurotrophic** pipecolic acid  
derivs. as **rotamase** inhibitors for stimulation of  
neuron growth)

IT 95076-93-0, **Rotamase**  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; **neurotrophic** pipecolic acid derivs. as  
**rotamase** inhibitors for stimulation of **neuron** growth)

IT 141083-86-5 141084-02-8 141084-12-0  
141084-13-1 141084-14-2 141084-34-6  
141084-35-7 141084-39-1 141084-41-5  
141084-42-6 141084-63-1 141097-91-8  
145912-40-9 186834-74-2 186834-75-3  
188614-85-9 188614-86-0 188614-93-9  
188614-99-5 188615-02-3 188615-03-4  
188615-04-5 188615-05-6 188615-14-7  
190444-03-2  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); BIOL (Biological study)  
(**neurotrophic** pipecolic acid derivs. as **rotamase**  
inhibitors for stimulation of **neuron** growth)

RE.CNT 173 THERE ARE 173 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Ando, T; Chem Comm, S Chem Comm 1975, P989
- (2) Andrus, M; J Am Chem Soc 1993, V115(2), P10420
- (3) Anon; EP 12401 1980 HCAPLUS
- (4) Anon; EP 48159 1982 HCAPLUS
- (5) Anon; EP 50800 1982 HCAPLUS
- (6) Anon; EP 73143 1983 HCAPLUS
- (7) Anon; EP 88350 1983 HCAPLUS
- (8) Anon; EP 196841 1986 HCAPLUS
- (9) Anon; DE 3508251 1986 HCAPLUS
- (10) Anon; EP 260118 1988 HCAPLUS
- (11) Anon; WO 8809789 1988 HCAPLUS
- (12) Anon; EP 333174 1989 HCAPLUS
- (13) Anon; EP 352000 1990 HCAPLUS
- (14) Anon; EP 378318 1990 HCAPLUS
- (15) Anon; DE 3931051 1990 HCAPLUS
- (16) Anon; WO 9012805 1990 HCAPLUS
- (17) Anon; DE 4015255 1991 HCAPLUS
- (18) Anon; EP 405994 1991 HCAPLUS
- (19) Anon; EP 419049 1991 HCAPLUS
- (20) Anon; WO 9104985 1991 HCAPLUS
- (21) Anon; WO 9113088 1991 HCAPLUS
- (22) Anon; JP 04149166 1992 HCAPLUS
- (23) Anon; GB 2247456 1992 HCAPLUS
- (24) Anon; EP 468339 1992 HCAPLUS
- (25) Anon; WO 9200278 1992 HCAPLUS
- (26) Anon; WO 9203472 1992 HCAPLUS
- (27) Anon; WO 9204370 1992 HCAPLUS
- (28) Anon; WO 9216501 1992 HCAPLUS
- (29) Anon; WO 9218478 1992 HCAPLUS
- (30) Anon; WO 9219593 1992 HCAPLUS
- (31) Anon; WO 9219745 1992 HCAPLUS
- (32) Anon; WO 9221313 1992 HCAPLUS
- (33) Anon; JP 05178824 1993 HCAPLUS
- (34) Anon; EP 572365 1993 HCAPLUS
- (35) Anon; ZA 9207782 1993 HCAPLUS
- (36) Anon; WO 9307269 1993 HCAPLUS
- (37) Anon; WO 9313066 1993 HCAPLUS
- (38) Anon; WO 9323548 1993 HCAPLUS
- (39) Anon; WO 9325546 1993 HCAPLUS

- (40) Anon; WO 9405639 1994 HCAPLUS
- (41) Anon; WO 9407858 1994 HCAPLUS
- (42) Anon; WO 9413629 1994 HCAPLUS
- (43) Anon; EP 652229 1995 HCAPLUS
- (44) Anon; WO 9512572 1995 HCAPLUS
- (45) Anon; WO 9524385 1995 HCAPLUS
- (46) Anon; WO 9526337 1995 HCAPLUS
- (47) Anon; WO 9535308 1995 HCAPLUS
- (48) Anon; WO 9535367 1995 HCAPLUS
- (49) Anon; WO 9606097 1996 HCAPLUS
- (50) Anon; WO 9615101 1996 HCAPLUS
- (51) Anon; WO 9617816 1996 HCAPLUS
- (52) Anon; WO 9641609 1996 HCAPLUS
- (53) Armistead; US 5156797 1992 HCAPLUS
- (54) Armistead; US 5330993 1994 HCAPLUS
- (55) Armistead, D; Acta Crystallogr 1995, VD51(4), P522 HCAPLUS
- (56) Askin, D; J Org Chem 1990, V55(20), P5451 HCAPLUS
- (57) Askin, D; Tetrahedron Lett 1989, V30(6), P671 HCAPLUS
- (58) Baader, E; Biochem J 1994, V300(2), P525 HCAPLUS
- (59) Baumann, K; Tetrahedron Lett 1995, V26(13), P2231
- (60) Bender, D; J Org Chem 1978, V43(17), P3354 HCAPLUS
- (61) Blaschke; 1974 HCAPLUS
- (62) Boulmedais, A; Bull Soc Chim Fr 1989, 2, P185 HCAPLUS
- (63) Burbaum; US 5319098 1994 HCAPLUS
- (64) Burbaum; US 5424454 1995 HCAPLUS
- (65) Bycroft, B; J Chem Soc 1975, V24, P988
- (66) Cameron, A; Proc Natl Acad Sci USA 1995, V92, P1784 HCAPLUS
- (67) Caufield, C; Annual Reports in Medicinal Chemistry, Chapter 21 1989, P195
- (68) Chakaraborty, T; Pure Appl Chem 1996, V68(3), P565
- (69) Chakaraborty, T; Chem Biol 1995, V2(3), P157 HCAPLUS
- (70) Coleman, R; Heterocycles 1989, V28(1), P157 HCAPLUS
- (71) Colombo, L; Tetrahedron 1982, V38(17), P2725 HCAPLUS
- (72) Cunliffe, C; J Med Chem 1992, V35(14), P2652 HCAPLUS
- (73) Cushman, D; Biochemistry 1977, V16(25), P5484 HCAPLUS
- (74) Dawson, T; Neuroscience 1994, V62(2), P569 HCAPLUS
- (75) Dawson, T; Proc Natl Acad Sci USA 1993, V90, P9808 HCAPLUS
- (76) Effenberger, F; 1989
- (77) Egbertson, M; J Org Chem 1989, V54(1), P11 HCAPLUS
- (78) Faelth, L; THEOCHEM 1989, V55, P239 HCAPLUS
- (79) Feutren, G; J of Autoimmunity 1992, V5, P183
- (80) Finberg, R; Science 1990, V249, P287 HCAPLUS
- (81) Fisher, M; J Org Chem 1991, V56(8), P2900 HCAPLUS
- (82) Fry, L; J of Autoimmunity 1992, V5, P277
- (83) Furber, M; J Am Chem Soc 1995, V117(27), P7267 HCAPLUS
- (84) Furber, M; Tetrahedron Lett 1993, V34(8), P1351 HCAPLUS
- (85) Gavras; US 4574079 1986 HCAPLUS
- (86) Gold; US 4808573 1989 HCAPLUS
- (87) Gold; US 4818749 1989 HCAPLUS
- (88) Goodfellow, V; Biochemistry 1993, V28(15), P6346
- (89) Goulet; US 5147877 1992 HCAPLUS
- (90) Goulet, M; Tetrahedron Lett 1990, V31(34), P4845 HCAPLUS
- (91) Goulet, M; Tetrahedron Lett 1991, V32(36), P4627 HCAPLUS
- (92) Goulet, M; Tetrahedron Lett 1991, V32(45), P6454 HCAPLUS
- (93) Hackl; US 5414083 1995 HCAPLUS
- (94) Haeusler, J; Chem Ber 1974, V107(1), P145 HCAPLUS
- (95) Harding, M; Nature Lett 1989, V341, P758 HCAPLUS
- (96) Harris; US 4374829 1983 HCAPLUS
- (97) Hauske, J; Bioorg Med Chem Lett 1994, V4(17), P2097 HCAPLUS
- (98) Hayward, C; An application of Suarez reaction to the regiospecific synthesis of the C28-C42 segment of rapamycin, 1993, P3989 HCAPLUS
- (99) Hayward, C; J Am Chem Soc 1993, V115(20), P9345 HCAPLUS
- (100) Hearn, W; J Org Chem 1967, V32(12), P4072 HCAPLUS
- (101) Holt, D; Bioorg Med Chem Lett 1994, V4(2), P315 HCAPLUS

- (102) Hovarth, R; Tetrahedron Lett 1993, V34(25), P3993  
(103) Jones, A; J Org Chem 1990, V55(9), P2786 HCAPLUS  
(104) Jones, T; J Am Chem Soc 1990, V112(8), P2998 HCAPLUS  
(105) Kaczmar; Makromol Chem 1976, V177, P1981 HCAPLUS  
(106) Karle, I; Int J Pept Protein Res 1994, V43(2), P160 HCAPLUS  
(107) Kino, T; J of Antibiotics 1987, V40(9), P1249 HCAPLUS  
(108) Kocienski, P; Tetrahedron Lett 1988, V29(35), P4481 HCAPLUS  
(109) Krapcho; US 4310461 1982 HCAPLUS  
(110) Krapcho; US 4390695 1983 HCAPLUS  
(111) Krapcho; US 4578474 1986 HCAPLUS  
(112) Krit, N; Khim-Farm Zh 1991, V25(7), P44 HCAPLUS  
(113) Linde, R; J Org Chem 1991, V56(7), P2534 HCAPLUS  
(114) Luengo, J; Chem Biol 1995, V2(7), P471 HCAPLUS  
(115) Luengo, J; Tetrahedron Lett 1993, V34(29), P4599 HCAPLUS  
(116) Luengo, J; Tetrahedron Lett 1993, V34(6), P991  
(117) Lyons, W; The Journal of Neuroscience 1995, V15, P2985 HCAPLUS  
(118) Marshall, J; Synth Commun 1975, V5(3), P237 HCAPLUS  
(119) Mashkovskii, M; Khim-Farm, Zh 1993, V27(10), P16 HCAPLUS  
(120) Munegumi, T; Bull Chem Soc Jpn 1987, V60(1), P243  
(121) Munoz, B; Bioorg Med Chem 1994, V2(10), P1085 HCAPLUS  
(122) Nakatsuta, M; J Am Chem Soc 1990, V112(14), P5583  
(123) Nelson, F; Tetrahedron Lett 1994, V35(41), P7557 HCAPLUS  
(124) Nicolaou, K; Che-Eur J 1995, V1(5), P318 HCAPLUS  
(125) Nicolaou, K; J Am Chem Soc 1993, V115(10), P4419 HCAPLUS  
(126) Pattenden, G; Tetrahedron Lett 1993, V34(16), P2677 HCAPLUS  
(127) Ponticelli, C; J of Autoimmunity 1992, V5, P315  
(128) Ranganathan, D; J Am Chem Soc 1994, V116(15), P6545 HCAPLUS  
(129) Ranganathan, D; J Chem Soc 1993, 1, P92 HCAPLUS  
(130) Rao, A; Tetrahedron Lett 1990, V31(10), P1439 HCAPLUS  
(131) Rao, A; Tetrahedron Lett 1991, V32(9), P1251 HCAPLUS  
(132) Rao, A; Tetrahedron Lett 1993, V34(44), P7111 HCAPLUS  
(133) Rinehart; US 5294603 1994 HCAPLUS  
(134) Schreiber; US 5447915 1995 HCAPLUS  
(135) Shanklin; US 4593102 1986 HCAPLUS  
(136) Shimano; US 4531964 1985 HCAPLUS  
(137) Shu, A; J Labelled Compd Radiopharm 1996, V38(3), P277  
(138) Skotnicki; US 5252579 1993 HCAPLUS  
(139) Skotnicki, J; Tetrah Lett 1994, V35(2), P197 HCAPLUS  
(140) Skotnicki, J; Tetrahedron Lett 1994, V35(2), P201 HCAPLUS  
(141) Slee, D; J Am Chem Soc 1995, V117(48), P1187  
(142) Smith, A; J Am Chem Soc 1995, V117(19), P5407 HCAPLUS  
(143) Soai, K; Chem Lett 1986, V11, P1897  
(144) Soai, K; J Chem Soc 1982, V21, P1282  
(145) Soai, K; J Chem Soc 1984, V15, P1016  
(146) Soai, K; J Chem Soc 1985, V1(4), P769  
(147) Soai, K; J Org Chem 1986, V57(17), P3290  
(148) Soai, K; Pept Chem 1982, V20, P81  
(149) Soai, K; Pept Chem 1986, V24, P327  
(150) Steffan, R; Tetrahedron Lett 1993, V34(23), P3699 HCAPLUS  
(151) Steglich, W; Synthesis 1976, V8, P399  
(152) Steglich, W; Synthesis 1978, V8, P622  
(153) Steiner, J; Nature Lett 1992, V358, P584 HCAPLUS  
(154) Steiner, J; Nonimmunosuppressive Ligands for Neuroimmunophilins Promote Nerve Extension In Vitro and In Vivo, V22, P297.13  
(155) Stocks, M; Bioorg Med Chem Lett 1994, V4(12), P1457 HCAPLUS  
(156) Stocks, M; Tetrahedron Lett 1995, V36(36), P6555 HCAPLUS  
(157) Takeuchi; US 5359138 1994 HCAPLUS  
(158) Tanaka, H; J Am Chem Soc 1987, V109(16), P5031 HCAPLUS  
(159) Tatlock, J; Bioorg Med Chem Lett 1995, V5(21), P2489 HCAPLUS  
(160) Teague, S; Bioorg Med Chem Lett 1995, V5(20), P2341 HCAPLUS  
(161) Tindall, R; J of Autoimmunity 1992, V5, P301  
(162) Tugwell, P; J of Autoimmunity 1992, V5, P231  
(163) Waldmann, H; Liebigs Ann Chem 1991, 12, P1317 HCAPLUS

- (164) Waldmann, H; Synlett 1990, V10, P627  
 (165) Wang, C; J Liq Chromatogr 1995, V18(9), P1801 HCAPLUS  
 (166) Wang, C; J Liq Chromatogr 1995, V18(13), P2559 HCAPLUS  
 (167) Wasserman, H; J Org Chem 1989, V54(12), P2785 HCAPLUS  
 (168) Wasserman, H; J Org Chem 1989, V54(22), P5406 HCAPLUS  
 (169) Whitesell, J; J Chem Soc, Chem Commun 1983, P802 HCAPLUS  
 (170) Williams, D; J Org Chem 1988, V53(191), P4643  
 (171) Yohannes, D; Tetrahedron Lett 1992, V33(49), P7469 HCAPLUS  
 (172) Yohannes, D; Tetrahedron Lett 1993, V34(13), P2075 HCAPLUS  
 (173) Zelle; US 5543423 1996 HCAPLUS

IT 95076-93-0, Rotamase

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors; **neurotrophic** pipecolic acid derivs. as  
**rotamase** inhibitors for stimulation of **neuron** growth)

RN 95076-93-0 HCAPLUS

CN Isomerase, peptidylprolyl cis-trans- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L24 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:17977 HCAPLUS

DN 128:70783

TI Pipecolic acid derivative inhibitors of **rotamase** enzyme activity  
 effective at stimulating **neuronal** growth

IN **Steiner, Joseph P.; Snyder, Solomon; Hamilton, Gregory S.**

PA GPI NIL Holdings, Inc., USA; Johns Hopkins Univ. School of Medicines  
 SO U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 474,072.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K031-445

ICS A61K038-18

NCL 514317000

CC 1-11 (Pharmacology)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5696135	A	19971209	US 1996-653905	19960528	<--
	US 5798355	A	19980825	US 1995-474072	19950607	<--
	CA 2206824	AA	19961219	CA 1996-2206824	19960605	<--
	CA 2206824	C	20010814			
	WO 9640140	A1	19961219	WO 1996-US9561	19960605	<--
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	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
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	GB 2305605	A1	19970416	GB 1996-24258	19960605	<--
	GB 2305605	B2	20000112			
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	EP 777478	A1	19970611	EP 1996-919227	19960605	<--
	EP 777478	B1	20011107			
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	CN 1187127	A	19980708	CN 1996-194555	19960605	<--
	CH 689541	A	19990615	CH 1996-2789	19960605	<--
	BR 9608485	A	19990706	BR 1996-8485	19960605	<--
	ES 2138518	A1	20000101	ES 1996-50031	19960605	<--
	ES 2138518	B1	20010101			
	NZ 310767	A	20001124	NZ 1996-310767	19960605	<--

ES 2166740	A1	20020416	ES 2000-20005003519960605	<--
FI 9604137	A	19970115	FI 1996-4137	19961015 <--
ZA 9608981	A	19980525	ZA 1996-8981	19961025
SE 9604097	A	19961208	SE 1996-4097	19961108 <--
DK 9601256	A	19961220	DK 1996-1256	19961108 <--
US 5843960	A	19981201	US 1997-787162	19970123 <--
US 5846981	A	19981208	US 1997-787163	19970123 <--
NO 9704290	A	19971204	NO 1997-4290	19970917 <--
LT 4516	B	19990625	LT 1998-2	19980106 <--
LV 11986	B	19980920	LV 1997-244	19980202 <--
US 6022878	A	20000208	US 1998-113330	19980710 <--
AU 9948793	A1	19991125	AU 1999-48793	19990916 <--
AU 740089	B2	20011101		
US 2002052372	A1	20020502	US 1999-435323	19991105 <--
PRAI US 1995-474072	A2	19950607	<--	
US 1996-653905	A	19960528		
AU 1996-61622	A3	19960605		
WO 1996-US9561	W	19960605		
US 1997-787162	A1	19970123		
US 1998-113330	A1	19980710		
AB	A method is disclosed for using <b>neurotrophic</b> pipecolic acid deriv. compds. having an affinity for <b>FKBP</b> -type <b>immunophilins</b> as inhibitors of the enzyme activity assocd. with <b>immunophilin</b> proteins, and particularly inhibitors of <b>peptidyl-prolyl isomerase</b> or <b>rotamase</b> enzyme activity to stimulate or promote <b>neuronal</b> growth or regeneration. The compds. of the invention are useful for treatment of <b>neurol.</b> disorders.			
ST	<b>neuron</b> growth pipecolate deriv <b>rotamase</b> inhibitor; regeneration <b>neuron</b> pipecolate deriv <b>rotamase</b> inhibitor; <b>neurol</b> disorder pipecolate deriv <b>rotamase</b> inhibitor			
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> ( <b>FK 506</b> -binding protein); pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b> growth and regeneration and treating <b>neurol.</b> disorders)			
IT	mRNA RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> and <b>GAP-43</b> ; pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b> growth and regeneration and treating <b>neurol.</b> disorders)			
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP-12</b> ( <b>FK 506</b> -binding protein, 12,000-mol.-wt.); pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b> growth and regeneration and treating <b>neurol.</b> disorders)			
IT	Biological transport ( <b>FKBP</b> ; pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b> growth and regeneration and treating <b>neurol.</b> disorders)			
IT	Animal cell line ( <b>PC12</b> ; pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b> growth and regeneration and treating <b>neurol.</b> disorders)			
IT	Nervous system ( <b>amyotrophic lateral sclerosis</b> ; pipecolic acid deriv. inhibitors of <b>rotamase</b> enzyme activity for stimulating <b>neuronal</b>			

- growth and regeneration and treating **neurol.** disorders)
- IT **Neurotrophic factors**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (brain-derived; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders, and use with **neurotrophic** factors)
- IT **Nerve**  
 (degeneration; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Nervous system**  
 (disease; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Nerve**  
 (facial; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Neurotrophic factors**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (glial-derived; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders, and use with **neurotrophic** factors)
- IT **Brain, disease**  
**Spinal cord**  
 (injury; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Growth factors, animal**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (neurite extension factors; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Nerve**  
 (neuron; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Nerve, disease**  
 (peripheral **neuropathy**; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Nerve, disease**  
 (peripheral, injury; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **Alzheimer's disease**  
**Nervous system agents**  
**Parkinson's disease**  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT **GAP-43 (protein)**  
**Immunophilins**  
**Myelin**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT Ciliary **neurotrophic** factor  
**Neurotrophic** factors  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders, and use with **neurotrophic** factors)
- IT Nerve  
 (sciatic; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT Ganglion  
 (spinal; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT Brain, disease  
 (stroke, brain damage-assocd.; pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT 104987-11-3  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT 9061-61-4, **Nerve growth factor** 53123-88-9, Rapamycin 59865-13-3, Cyclosporin A 149438-31-3, WAY-124466  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT 535-75-1D, Pipecolic acid, derivs. 141084-63-1  
 152754-33-1 152754-34-2 152754-35-3  
 152754-36-4 152754-42-2 155668-86-3 157757-22-7  
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 186834-74-2 186834-75-3 186834-76-4  
 186834-77-5 186834-78-6 186834-79-7  
 186834-80-0 186834-81-1 186834-82-2  
 186834-83-3 186834-84-4 186834-85-5  
 186834-86-6 186834-87-7 186834-88-8  
 200417-73-8 200728-03-6 200728-04-7  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT 9025-75-6, Calcineurin 95076-93-0, **Rotamase**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)
- IT 130939-66-1, **Neurotrophin 3**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders, and use with **neurotrophic** factors)

IT 141084-63-1

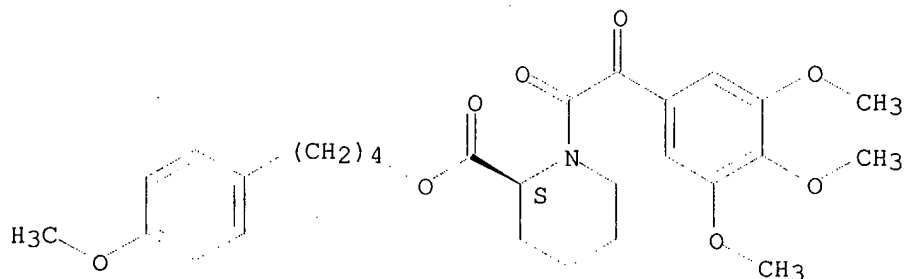
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pipecolic acid deriv. inhibitors of **rotamase** enzyme activity for stimulating **neuronal** growth and regeneration and treating **neurol.** disorders)

RN 141084-63-1 HCAPLUS

CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-, 4-(4-methoxyphenyl)butyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:397372 HCAPLUS

DN 127:13470

TI **Neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders

IN **Steiner, Joseph P.; Hamilton, Gregory S.**

PA Guilford Pharmaceuticals Inc., USA

SO PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-445

ICS A61K031-40

CC 1-11 (Pharmacology)

FAN.CNT 8

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9716190	A1	19970509	WO 1996-US13624	19960826 <--
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
US 2002013344	A1	20020131	US 1995-551026	19951031 <--
US 5801197	A	19980901	US 1996-645149	19960513 <--
AU 9668573	A1	19970522	AU 1996-68573	19960826 <--
AU 713302	B2	19991125		
EP 859614	A1	19980826	EP 1996-929014	19960826 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI			



	JP 11514643	T2	19991214	JP 1996-517308	19960826 <--
	ZA 9608982	A	19980907	ZA 1996-8982	19961025
	NO 9801903	A	19980630	NO 1998-1903	19980427 <--
PRAI	US 1995-551026	A	19951031 <--		
	US 1996-645149	A	19960513		
	WO 1996-US13624	W	19960826		
OS	MARPAT 127:13470				
AB	A method is disclosed of using specially formulated <b>neurotrophic</b> pipecolic acid derivs. (Markush included) having an affinity for <b>FKBP</b> -type <b>immunophilins</b> as inhibitors of <b>rotamase</b> enzyme activity to stimulate or promote <b>neuronal</b> growth or regeneration. The compds. of the invention may be used in treatment of <b>neurodegenerative</b> disorders, e.g. <b>Alzheimer's</b> disease, <b>Parkinson's</b> disease, and other <b>neuropathies</b> .				
ST	pipecolic acid deriv <b>immunophilin</b> <b>rotamase</b> inhibitor; <b>neurodegeneration</b> <b>Alzheimer's</b> <b>Parkinson's</b> pipecolic acid deriv; <b>neurotrophic</b> factor pipecolic acid deriv <b>neurodegeneration</b> ; <b>FKBP</b> <b>immunophilin</b> <b>rotamase</b> pipecolic acid deriv				
IT	Immunosuppressants (non)immunosuppressant <b>neurotrophic</b> pipecolic acid derivs. as <b>rotamase</b> inhibitors for treatment of <b>neurodegenerative</b> disorders in combination with <b>neurotrophic</b> factors)				
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> ( <b>FK</b> 506-binding protein); pipecolic acid derivs. <b>neurotrophic</b> action in relation to inhibition of <b>rotamase</b> activity of <b>FKBP</b> -type <b>immunophilins</b> )				
IT	<b>Immunophilins</b> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> -type; pipecolic acid derivs. <b>neurotrophic</b> action in relation to inhibition of <b>rotamase</b> activity of <b>FKBP</b> -type <b>immunophilins</b> )				
IT	<b>Neurotrophic</b> factors RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>brain</b> -derived; <b>neurotrophic</b> pipecolic acid derivs. as <b>rotamase</b> inhibitors for treatment of <b>neurodegenerative</b> disorders in combination with <b>neurotrophic</b> factors)				
IT	<b>Nerve</b> (degeneration, prevention; <b>neurotrophic</b> pipecolic acid derivs. as <b>rotamase</b> inhibitors for treatment of <b>neurodegenerative</b> disorders in combination with <b>neurotrophic</b> factors)				
IT	<b>Nervous</b> system (degeneration; <b>neurotrophic</b> pipecolic acid derivs. as <b>rotamase</b> inhibitors for treatment of <b>neurodegenerative</b> disorders in combination with <b>neurotrophic</b> factors)				
IT	<b>Heregulins</b> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>glial</b> growth factor; <b>neurotrophic</b> pipecolic acid derivs. as <b>rotamase</b> inhibitors for treatment of <b>neurodegenerative</b> disorders in combination with <b>neurotrophic</b> factors)				

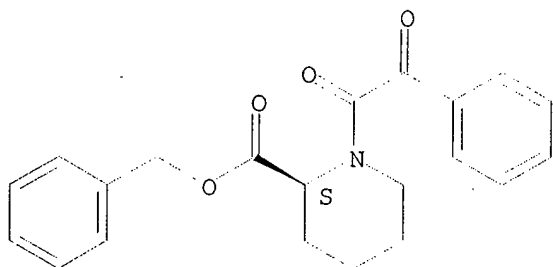
- IT **Brain, disease**  
**Spinal cord**  
 (injury; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT **Nerve**  
 (neuron, regeneration promoters; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT **Nerve, disease**  
 (neuropathy, peripheral; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT **Alzheimer's disease**  
**Parkinson's disease**  
 (neurotrophic pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT **Ciliary neurotrophic factor**  
**Neurotrophic factors**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (neurotrophic pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT **Brain, disease**  
 (stroke; **neurotrophic** pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT 535-75-1D, Pipecolic acid, derivs. 141083-86-5  
 141084-02-8 141084-12-0 141084-13-1  
 141084-14-2 141084-34-6 141084-35-7  
 141084-39-1 141084-41-5 141084-42-6  
 141084-63-1 141097-91-8 145912-40-9  
 145913-15-1 145913-16-2 186834-74-2  
 186834-75-3 188614-85-9 188614-86-0  
 188614-94-0 188614-99-5 188615-02-3  
 188615-05-6 188615-14-7 190444-03-2  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (neurotrophic pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders)
- IT 95076-93-0, Rotamase  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (neurotrophic pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders)
- IT 130939-66-1, Neurotrophin 3  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (neurotrophic pipecolic acid derivs. as **rotamase** inhibitors for treatment of **neurodegenerative** disorders in combination with **neurotrophic** factors)
- IT 141083-86-5  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (neurotrophic pipecolic acid derivs. as **rotamase**

inhibitors for treatment of neurodegenerative disorders)

RN 141083-86-5 HCAPLUS

CN 2-Piperidinecarboxylic acid, 1-(oxophenylacetyl)-, phenylmethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:307496 HCAPLUS

DN 126:272378

TI Methods and compositions for stimulating neurite growth using compds. with affinity for FKBP12 in combination with neurotrophic factors

IN Armistead, David M.

PA Vertex Pharmaceuticals Incorporated, USA

SO S. African, 54 pp.

CODEN: SFXAB

DT Patent

LA English

IC ICM C07D

ICS A61K

CC 1-11 (Pharmacology)

Section cross-reference(s): 2, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	ZA 9604852	A	19960729	ZA 1996-4852	19960607	<--
	US 6037370	A	20000314	US 1995-486004	19950608	<--
	CA 2222430	AA	19961227	CA 1996-2222430	19960606	<--
	WO 9641609	A2	19961227	WO 1996-US10123	19960606	<--
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG					
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
	AU 9661119	A1	19970109	AU 1996-61119	19960606	<--
	EP 831812	A2	19980401	EP 1996-918469	19960606	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
	CN 1202104	A	19981216	CN 1996-195690	19960606	<--
	BR 9609333	A	19991013	BR 1996-9333	19960606	<--
	NZ 310339	A	20000327	NZ 1996-310339	19960606	<--
	NZ 501709	A	20001027	NZ 1996-501709	19960606	<--
	JP 2002502355	T2	20020122	JP 1997-503275	19960606	<--
	IL 122346	A1	20020523	IL 1996-122346	19960606	<--
	US 6124328	A	20000926	US 1997-795956	19970228	<--
	US 6326387	B1	20011204	US 2000-616539	20000714	<--
PRAI	US 1995-486004	A	19950608	<--		
	NZ 1996-310339	A1	19960606			

WO 1996-US10123 W 19960606  
 US 1997-795956 A3 19970228

OS MARPAT 126:272378

AB A pharmaceutically acceptable compn. is disclosed which comprises (a) a **neurotropic** amt. of a compd. with affinity for **FK-506-binding protein FKBP12** e.g. having the formula  
BAC(:O)CH(K)N(J)C(:O)C(:E)D [A = O, NH, N(C1-4 alkyl); B = H, C1-6 (branched) alkyl, C2-6 (branched) alkenyl, C5-7 cycloalkyl, etc.; D = U; E = O, CHU (if D = H, then E = CH-U; if E = O, then D is not H); U = H, O-(C1-4)-straight or branched alkyl, O-(C2-4)-straight or branched alkenyl, C1-6 (branched) alkyl, C2-6 (branched) alkenyl, (substituted) C5-7 cycloalkyl, (substituted) C5-7 cycloalkenyl, etc.; J = H, C1-2 alkyl; K = C1-4 (branched) alkyl, benzyl, cyclohexylmethyl, or J and K taken together form 5-7 membered heterocyclic ring which may contain O, S, SO, SO<sub>2</sub>; and the stereochem. at carbon to which K is bonded = R or S] and pharmaceutically acceptable derivs. thereof; (b) a **neurotrophic** factor; and (c) a pharmaceutically carrier. The **neurotrophic** factor may be e.g. **nerve growth factor**. The methodol. of the invention can be used to promote repair of **neuronal** damage caused by disease or phys. trauma.

ST **FKBP12** compd **neurotrophic** factor **neurite** growth;  
**nerve** damage **FKBP12** compd **neurotrophic** factor

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (FKBP-12 (FK 506-binding protein, 12,000-mol.-wt.); compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Nervous** system

(amyotrophic lateral sclerosis; compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Neurotrophic** factors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(brain-derived; compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Alzheimer's** disease

Axon

Drug delivery systems

**Nervous** system agents

**Parkinson's** disease

(compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT Ciliary **neurotrophic** factor

**Neurotrophic** factors

Platelet-derived **growth** factors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Nerve**

(degeneration; compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Nerve**, disease

(facial, injury, crush; compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

IT **Neurotrophic factors**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(glial-derived; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Spinal cord**  
(injury; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Nerve, disease**  
(motor; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Nerve**  
(neuron; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Nerve, disease**  
(sciatic, injury, crush; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Ischemia**  
(stroke-assocd.; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT **Brain, disease**  
(stroke; compds. with affinity for FKBP12 in combination with neurotrophic factors for stimulating neurite growth)

IT 9061-61-4, Nerve growth factor 61912-98-9, IGF 61912-98-9D, IGF, truncated derivs. 94726-50-8  
106096-92-8, Acidic fibroblast growth factor  
106096-93-9, Basic fibroblast growth factor  
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188615-56-7 188615-57-8 188615-58-9  
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188615-62-5 188615-63-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds. with affinity for FKBP12 in combination with  
neurotrophic factors for stimulating neurite growth)

IT 188615-64-7 188615-65-8 188615-66-9  
188615-67-0 188615-68-1 188615-69-2  
188615-70-5 188615-71-6 188615-72-7  
188618-35-1 189008-26-2 189008-27-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds. with affinity for FKBP12 in combination with  
neurotrophic factors for stimulating neurite growth)

IT 94726-50-8

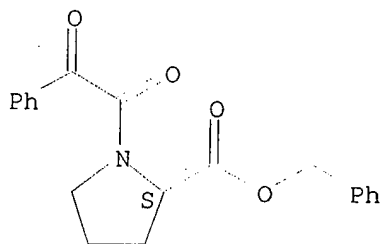
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds. with affinity for **FKBP12** in combination with **neurotrophic** factors for stimulating **neurite** growth)

RN 94726-50-8 HCAPLUS

CN L-Proline, 1-(oxophenylacetyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:165074 HCAPLUS

DN 126:152815

TI **Rotamase** inhibitors for treatment of **neurological** diseases

IN **Steiner, Joseph P.**; Synder, Solomon; **Hamilton, Gregory S.**

PA Guilford Pharmaceuticals, Inc., USA; Johns Hopkins University School of Medicine

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K031-445

ICS A61K031-435; A61K031-50; A61K031-71; A61K038-00; C07D211-60; C07D491-04

CC 1-11 (Pharmacology)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08333256	A2	19961217	JP 1996-132866	19960430 <--
	JP 3060373	B2	20000710		
	US 5798355	A	19980825	US 1995-474072	19950607 <--
	CN 1187127	A	19980708	CN 1996-194555	19960605 <--
	LT 4516	B	19990625	LT 1998-2	19980106 <--
PRAI	US 1995-474072	A	19950607 <--		

AB **Rotamase** or **peptidyl-prolyl**

**isomerase** inhibitors e.g. **neurotrophic** pipecolinic acid derivs. (including **FK506**, Way 124666, Rapamycin, SLB 506, etc.) with **FKBP**-type **immunophilin** affinity are claimed for stimulating **nerve** growth and regeneration after **nerve** injury in treatment of **neurol.** diseases e.g. **Alzheimer**'s disease, **parkinsonism**, muscle atrophy, etc. The effects of these inhibitors were comparable to that of **nerve growth factor**.

ST **rotamase** inhibitor pipecolinate **neurol** disease

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(**FKBP** (**FK** 506-binding protein);

**rotamase** inhibitors for treatment of **neurol.**

diseases)

IT Muscle, disease  
(atrophy; rotamase inhibitors for treatment of neurol  
diseases)

IT Nervous system  
(disease; rotamase inhibitors for treatment of neurol  
diseases)

IT Alzheimer's disease  
Parkinson's disease  
(rotamase inhibitors for treatment of neurol.  
diseases)

IT Immunophilins  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(rotamase inhibitors for treatment of neurol.  
diseases)

IT 95076-93-0, Rotamase  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(inhibitors; rotamase inhibitors for treatment of  
neurol. diseases)

IT 535-75-1D, Pipecolinic acid, derivs. 53123-88-9, Rapamycin  
104987-11-3, FK506 141084-63-1 145021-24-5  
145021-25-6 145021-36-9 145021-37-0 145021-38-1 145021-39-2  
145021-41-6 145021-43-8 145021-46-1 145021-47-2 145021-65-4  
145021-66-5 145021-67-6 145021-68-7 145037-51-0 147438-29-7  
147438-30-0 147438-31-1 148493-28-1  
149438-31-3 152754-34-2 152754-35-3  
152754-36-4 152754-37-5 152754-38-6  
152754-39-7 152754-40-0 152754-41-1  
152754-42-2 155255-24-6 155255-27-9  
155255-28-0 155255-29-1 155255-30-4  
155255-31-5 155255-32-6 155399-01-2  
155399-02-3 155668-46-5 155668-47-6  
155668-49-8 155668-50-1 155668-51-2  
155668-52-3 155668-53-4 155668-54-5  
155668-55-6 155668-56-7 155668-57-8  
155668-58-9 155668-59-0 155668-61-4 155668-63-6  
155668-64-7 156038-45-8 157634-33-8 157634-34-9 157634-35-0  
157757-22-7 157757-23-8 157757-24-9 165047-17-6  
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186834-65-1 186959-50-2 186959-54-6 186959-57-9  
186959-60-4 186959-61-5 186959-64-8 186959-67-1 186959-70-6  
186959-77-3 186960-01-0 186960-09-8 186974-30-1  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(rotamase inhibitors for treatment of neurol.  
diseases)

IT 95076-93-0, Rotamase  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(inhibitors; rotamase inhibitors for treatment of  
neurol. diseases)

RN 95076-93-0 HCAPLUS  
CN Isomerase, peptidylprolyl cis-trans- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L24 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS  
AN 1997:155088 HCAPLUS  
DN 126:153650  
TI Regulation of biological processes using rapamycin and FK506





study); USES (Uses)

(FKBP-12 (FK 506-binding protein, 12,000-mol.-wt.), analogs, fusion products; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Proteins, specific or class

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(FRAP (FKBP-rapamycin-assocd. protein), fusion products; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(GAL4, fusion products with FKBP12 and FRAP, regulation of gene expression by; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Genetic element

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(IRES (internal ribosomal entry site) element, in bicistronic expression vectors; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(NF-.kappa.B (nuclear factor .kappa.B), p65 subunit fusion products with FKBP12 and FRAP, regulation of gene expression by; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(VP16, fusion products with FKBP12 and FRAP, regulation of gene expression by; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT RNA formation factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(ZFHD1, fusion products with FKBP12 and FRAP, regulation of gene expression by; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Gene

(expression, regulation by rapamycin of; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Chimeric gene

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(for transcription factor fusion products with FKBP12 and FRAP; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

IT Fas antigen

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(fusion products with FKBP12 and FRAP, regulation of gene expression by; regulation of biol. processes using rapamycin and FK506-binding proteins fusion proteins)

- IT Transcription factors  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
 (fusion products, in rapamycin regulation of gene expression; regulation of biol. processes using rapamycin and **FK506** -binding proteins fusion proteins)
- IT Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (gene TOR1, fusion products; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (gene TOR2, fusion products; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (gene *lexA*, fusion products with rapamycin-binding proteins, regulation of DNA binding by; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Promoter (genetic element)  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (interleukin 2, rapamycin regulation of gene expression from; regulation of biol. processes using rapamycin and **FK506** -binding proteins fusion proteins)
- IT Peptide library  
 (of fusion proteins contg. modified **FKBP** domains; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (p19BL87G6FKBP, chimeric gene for LexA-**FKBP** fusion protein, rapamycin regulation of DNA binding in relation to; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (p19BL87G6FRB, chimeric gene for LexA-FRB fusion protein, rapamycin regulation of DNA binding in relation to; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Tumor necrosis factor receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (p55, fusion products with rapamycin-binding proteins; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (pCGNN-1FRAPe-ZFHD1, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (pCGNN-1FRAPe-p65(361-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (pCGNN-1FRAPe-p65(450-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
 (pCGNN-1FRB-VP16, VP16-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)

- proteins)
- IT Plasmid vectors  
(pCGNN-1FRB-p65(361-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-1FRB-p65(361-550)-IRES-ZFD1-3FKBP, chimeric genes for FRAP-NF-.kappa.B p65 subunit and ZFD1-**FKBP** fusion proteins on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-1FRB-p65(450-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-2FRAPe-ZFHD1, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-2FRB-VP16, VP16-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-2FRB-p65(450-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-3FRAPe-p65(361-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-3FRAPe-p65(450-550), FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-3FRB, gene for FLAG-labeled FRB on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-FRAPb-p65, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-FRAPc-p65, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-FRAPd-p65, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-FRAPe-p65, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-FRAPa-p65, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-2FRB, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors

- (pCGNN-GAL-3FRB, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-4FRB, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPb, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPc, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPd, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPe, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPf, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPg, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPh, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPi, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-GAL-FRAPa, GAL4-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-1FRB, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-2FRAPe, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-2FRB, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-3FRAPe, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-4FRAPe, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)

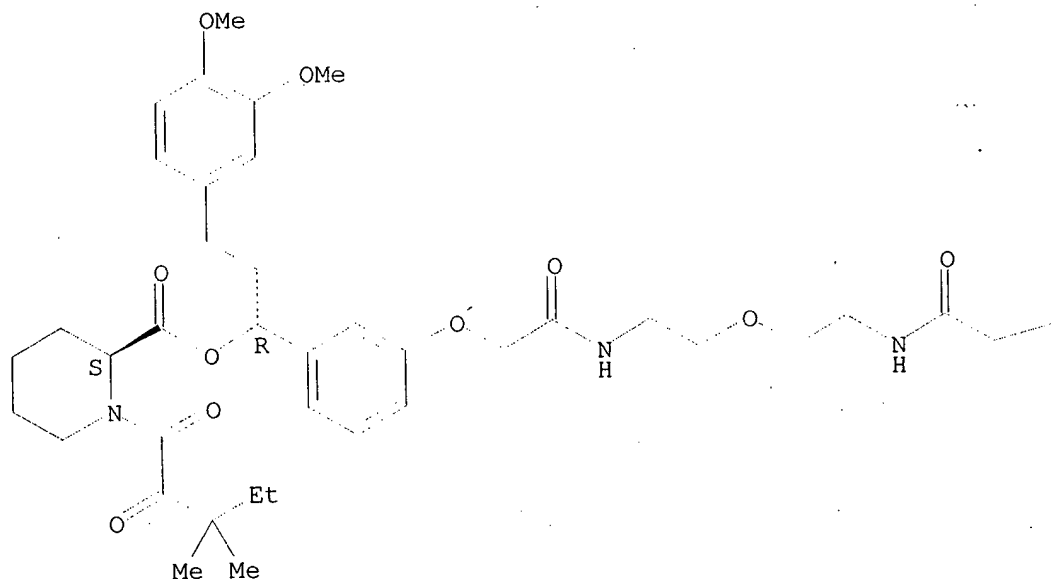
- IT Plasmid vectors  
(pCGNN-ZFHD1-FRAPb, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-FRAPe, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-ZFHD1-FRAPa, ZFHD1-FRAP fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-p65(361-550)-1FRAPe, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-p65(361-550)-3FRAPe, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-p65(450-550)-1FRAPe, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNN-p65(450-550)-3FRAPe, FRAP-NF-.kappa.B p65 subunit fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNNZFHD1-**FKBPx1**, ZFHD1-**FKBP12** fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pCGNNZFHD1-**FKBPx3**, ZFHD1-**FKBP12** fusion protein gene on; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pZHWTx12-CMV-SEAP, secreted alk. phosphatase reporter gene on, rapamycin regulation of expression of; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pZHWTx12-CMV-hGH, human growth hormone reporter gene on, rapamycin regulation of expression of; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Plasmid vectors  
(pZHWTx12-IL2-SEAP, secreted alk. phosphatase reporter gene on, rapamycin regulation of expression from IL2 promoter of; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Myristoylation  
(peptide target for, incorporation into **FKBPs** of; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Nerve growth factor receptors  
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(p75, fusion products with **FKBP** and FRAP, in rapamycin regulation of apoptosis; regulation of biol. processes using rapamycin and **FK506**-binding proteins fusion proteins)
- IT Interleukin 2  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(rapamycin regulation of expression from promoter of gene for;

- regulation of biol. processes using rapamycin and **FK506**  
-binding proteins fusion proteins)
- IT Apoptosis  
Cell differentiation  
Cell proliferation  
Signal transduction, biological  
Transcription, genetic  
(regulation by rapamycin of; regulation of biol. processes using  
rapamycin and **FK506**-binding proteins fusion proteins)
- IT CD3 (antigen)  
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU  
(Biological use, unclassified); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(.zeta.-chain, fusion products with **FKBP12** and FRAP,  
regulation of gene expression by; regulation of biol. processes using  
rapamycin and **FK506**-binding proteins fusion proteins)
- IT 80449-02-1, Protein tyrosine kinase  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(activation by rapamycin of; regulation of biol. processes using  
rapamycin and **FK506**-binding proteins fusion proteins)
- IT 186847-32-5 186847-34-7 186847-36-9  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)  
(amino acid sequence; regulation of biol. processes using rapamycin and  
**FK506**-binding proteins fusion proteins)
- IT 162926-18-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(biotinylation of; regulation of biol. processes using rapamycin and  
**FK506**-binding proteins fusion proteins)
- IT 104987-11-3, **FK506**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(conjugation with fluorescein of; regulation of biol. processes using  
rapamycin and **FK506**-binding proteins fusion proteins)
- IT 186845-13-6 186845-14-7  
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological  
study); USES (Uses)  
(nucleotide sequence, chimeric genes contg.; regulation of biol.  
processes using rapamycin and **FK506**-binding proteins fusion  
proteins)
- IT 186847-33-6 186847-35-8 186847-37-0  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)  
(nucleotide sequence; regulation of biol. processes using rapamycin and  
**FK506**-binding proteins fusion proteins)
- IT 152406-15-0P 154074-71-2P 186757-74-4P 186757-77-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and reactions of, in prepn. fluoresceinated **FK506**;  
regulation of biol. processes using rapamycin and **FK506**  
-binding proteins fusion proteins)
- IT 186757-82-4P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(prepn. of; regulation of biol. processes using rapamycin and  
**FK506**-binding proteins fusion proteins)
- IT 186757-79-9P 186757-80-2P 186757-81-3P  
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP  
(Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP  
(Preparation); PROC (Process)  
(rapamycin analog, binding to FRAP of complexes with **FKBP**;  
regulation of biol. processes using rapamycin and **FK506**  
-binding proteins fusion proteins)

- IT 178446-27-0  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (rapamycin analog, regulation of apoptosis using; regulation of biol.  
 processes using rapamycin and **FK506**-binding proteins fusion  
 proteins)
- IT 53123-88-9D, Rapamycin, analogs  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); BUU (Biological use, unclassified); BIOL (Biological  
 study); USES (Uses)  
 (regulation of biol. processes using rapamycin and **FK506**  
 -binding proteins fusion proteins)
- IT 161754-08-1P 161754-09-2P 186757-66-4P 186757-67-5P 186757-68-6P  
 186757-69-7P 186757-70-0P 186757-71-1P 186757-72-2P 186757-73-3P  
 186794-75-2P 186794-97-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of; regulation of biol. processes using rapamycin and  
**FK506**-binding proteins fusion proteins)
- IT 178446-27-0  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (rapamycin analog, regulation of apoptosis using; regulation of biol.  
 processes using rapamycin and **FK506**-binding proteins fusion  
 proteins)
- RN 178446-27-0 HCAPLUS  
 CN 2-Piperidinecarboxylic acid, 1-(3,3-dimethyl-1,2-dioxopentyl)-,  
 oxybis[2,1-ethanediylimino(2-oxo-2,1-ethanediyl)oxy-3,1-phenylene[(1R)-3-  
 (3,4-dimethoxyphenyl)propylidene]] ester, (2S,2'S)-(9CI) (CA INDEX NAME)

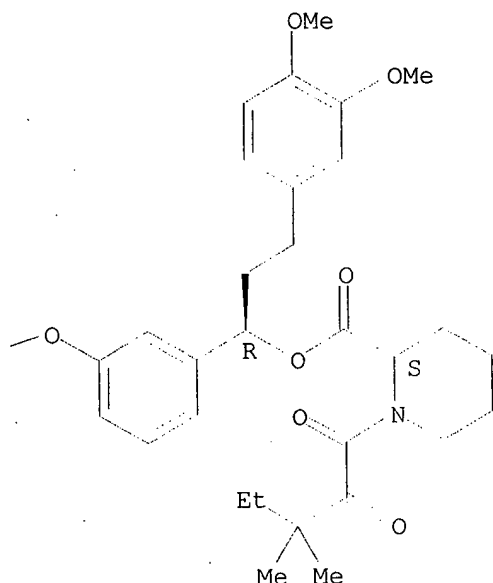
Absolute stereochemistry.

PAGE 1-A





PAGE 1-B



L24 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1997:151523 HCAPLUS  
 DN 126:152817  
 TI Pipecolic acid derivatives as inhibitors of **rotamase** activity,  
 and use in treatment of **nervous** system disorders.  
 IN **Steiner, Joseph P.; Snyder, Solomon; Hamilton, Gregory**  
 S.  
 PA Guilford Pharmaceuticals Inc., USA; Johns Hopkins University School of  
 Medicine  
 SO PCT Int. Appl., 110 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-495  
 ICS A61K031-50; A61K031-44; A61K031-445  
 CC 1-11 (Pharmacology)  
 Section cross-reference(s): 7  
 FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640140	A1	19961219	WO 1996-US9561	19960605 <--
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
US 5798355	A	19980825	US 1995-474072	19950607 <--
US 5696135	A	19971209	US 1996-653905	19960528 <--
AU 9661622	A1	19961230	AU 1996-61622	19960605 <--
AU 710423	B2	19990923		
GB 2305605	A1	19970416	GB 1996-24258	19960605 <--
GB 2305605	B2	20000112		
DE 19680255	T	19970605	DE 1996-19680255	19960605 <--
EP 777478	A1	19970611	EP 1996-919227	19960605 <--
EP 777478	B1	20011107		
R:	BE, FR, GR, IE, IT, MC, NL			

	BR 9608485	A	19990706	BR 1996-8485	19960605 <--
	NZ 310767	A	20001124	NZ 1996-310767	19960605 <--
	FI 9604137	A	19970115	FI 1996-4137	19961015 <--
	SE 9604097	A	19961208	SE 1996-4097	19961108 <--
	DK 9601256	A	19961220	DK 1996-1256	19961108 <--
	NO 9704290	A	19971204	NO 1997-4290	19970917 <--
PRAI	US 1995-474072	A	19950607 <--		
	US 1996-653905	A	19960528		
	WO 1996-US9561	W	19960605		
AB	<b>Neurotrophic</b> pipecolic acid derivs. having an affinity for <b>FKBP</b> -type <b>immunophilins</b> are useful as inhibitors of the enzyme activity assocd. with <b>immunophilin</b> proteins, and in particular inhibitors of <b>peptidyl-prolyl isomerase</b> or <b>rotamase</b> enzyme activity, to stimulate or promote <b>neuronal</b> growth or regeneration. The compds, of the invention (e.g. Way-124,666; SLB-506) are useful for the treatment of <b>neurol.</b> disorders. The compds. may be used in conjunction with a <b>neurotrophic</b> factor ( <b>neurotrophic growth factor</b> , <b>brain-derived growth factor</b> , <b>neurotrophin-3</b> , etc.).				
ST	pipecolic acid deriv <b>rotamase</b> inhibitor; <b>nervous</b> system disorder pipecolic acid deriv; <b>nerve</b> growth regeneration pipecolic acid deriv				
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> ( <b>FK 506-binding protein</b> ), <b>FKBP</b> -type <b>immunophilins</b> ; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	Biological transport ( <b>FKBP</b> transport in <b>sciatic nerve</b> )				
IT	Proteins, specific or class RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP-12</b> ( <b>FK 506-binding protein</b> , 12,000-mol.-wt.); pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Immunophilins</b> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) ( <b>FKBP</b> -type; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Nervous system</b> (amyotrophic lateral sclerosis; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Nerve</b> (degeneration; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Nervous system</b> (disease; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Brain, disease</b> <b>Spinal cord</b> (injury; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				
IT	<b>Nerve</b> (myelinated, myelination recovery; pipecolic acid derivs. as inhibitors of <b>rotamase</b> activity, and use in treatment of <b>nervous</b> system disorders.)				

- IT Regeneration, animal  
(**nerve**; **pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Nerve, disease  
(peripheral **neuropathy**; **pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Nerve, disease  
(peripheral, injury; **pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Alzheimer's disease  
Immunosuppressants  
Nervous system agents  
Parkinson's disease  
(**pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Neurotrophic factors  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT GAP-43 (protein)  
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
(**pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Nerve  
(regeneration; **pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT Ganglion  
(**spinal**; **FK506** as **neurotrophic** for sensory ganglia)
- IT Brain, disease  
(**stroke**, **brain damage-assocd.**; **pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT 130939-66-1, **Neurotropin-3**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in combination with **neurotrophic** factor in treatment of **nervous** system disorders.)
- IT 9061-61-4, **Nerve growth factor** 53123-88-9, Rapamycin 59865-13-3, Cyclosporin A 104987-11-3, **FK-506**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(**pipecolic acid** derivs. as inhibitors of **rotamase** activity, and use in treatment of **nervous** system disorders.)
- IT 535-75-1D, **Pipecolic acid**, derivs. 141084-63-1  
145021-24-5 145021-25-6 145021-28-9 145021-36-9  
145021-37-0 145021-38-1 145021-41-6 145021-43-8 145021-47-2  
145021-65-4 145021-66-5 145021-67-6 145021-68-7 145037-51-0  
147438-30-0 147438-31-1 148493-28-1  
149438-31-3, Way-124466 152754-34-2 152754-35-3  
152754-36-4 152754-37-5 152754-38-6  
152754-40-0 152754-41-1 152754-42-2 152754-45-5  
153011-31-5, SBL 506 155255-24-6 155255-25-7

155255-27-9 155255-28-0 155255-29-1  
 155255-30-4 155255-31-5 155255-32-6  
 155367-80-9 155399-01-2 155399-02-3  
 155399-09-0 155668-46-5 155668-47-6  
 155668-49-8 155668-50-1 155668-51-2  
 155668-52-3 155668-53-4, 2-Piperidinecarboxylic acid,  
 1-(1,2-dioxopropyl)-, ethyl ester, (+-)- 155668-54-5  
 155668-55-6 155668-56-7 155668-57-8  
 155668-58-9 155668-59-0 155668-60-3 155668-61-4  
 155668-63-6 155668-64-7 155668-86-3 155668-89-6  
 156038-45-8 157634-33-8 157634-34-9 157634-35-0 157757-22-7  
 157757-23-8 157757-24-9 158631-86-8 164913-78-4  
 164913-79-5 164913-80-8 165047-17-6 186834-56-0 186834-57-1  
 186834-58-2 186834-59-3 186834-60-6 186834-61-7 186834-62-8  
 186834-63-9 186834-64-0 186834-65-1  
 186834-66-2 186834-67-3 186834-68-4  
 186834-69-5 186834-70-8 186834-71-9  
 186834-72-0 186834-73-1 186834-74-2  
 186834-75-3 186834-76-4 186834-77-5  
 186834-78-6 186834-79-7 186834-80-0  
 186834-81-1 186834-82-2 186834-83-3  
 186834-84-4 186834-85-5 186834-86-6  
 186834-87-7 186834-88-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pipecolic acid derivs. as inhibitors of **rotamase** activity,  
 and use in treatment of **nervous** system disorders.)

IT 95076-93-0, **Rotamase**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pipecolic acid derivs. as inhibitors of **rotamase** activity,  
 and use in treatment of **nervous** system disorders.)

IT 141084-63-1

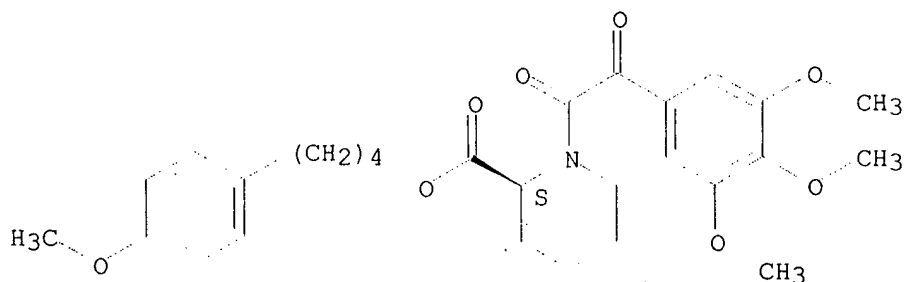
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pipecolic acid derivs. as inhibitors of **rotamase** activity,  
 and use in treatment of **nervous** system disorders.)

RN 141084-63-1 HCAPLUS

CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
 4-(4-methoxyphenyl)butyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L24 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS

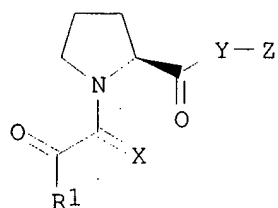
AN 1997:127457 HCAPLUS

DN 126:144545

TI Preparation of **immunophilin**-binding glyoxalylproline esters as  
**rotamase** enzyme activity inhibitors

IN Hamilton, Gregory S.; Steiner, Joseph P.  
 PA Guilford Pharmaceuticals Inc., USA  
 SO PCT Int. Appl., 83 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D207-16  
 ICS A61K031-40  
 CC 34-2 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 7, 15, 63  
 FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9640633	A1	19961219	WO 1996-US9701	19960605 <--
	W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
	US 5614547	A	19970325	US 1995-479436	19950607 <--
	US 5859031	A	19990112	US 1996-650461	19960521 <--
	AU 9661062	A1	19961230	AU 1996-61062	19960605 <--
	AU 703118	B2	19990318		
	GB 2305176	A1	19970402	GB 1996-24257	19960605 <--
	GB 2305176	B2	19991222		
	EP 769006	A1	19970423	EP 1996-918384	19960605 <--
	EP 769006	B1	20001108		
	R:	BE, FR, GR, IE, IT, MC, NL			
	DE 19680256	T	19970619	DE 1996-19680256	19960605 <--
	BR 9608444	A	19990105	BR 1996-8444	19960605 <--
	JP 2000503626	T2	20000328	JP 1997-501958	19960605 <--
	AT 9609002	A	20010215	AT 1996-9002	19960605 <--
	AT 408187	B	20010925		
	EE 200000317	A	20010615	EE 2000-200000317	19960605 <--
	RU 2186770	C2	20020810	RU 1997-111860	19960605 <--
	FI 9604328	A	19961230	FI 1996-4328	19961028 <--
	SE 9604098	A	19961208	SE 1996-4098	19961108 <--
	NO 9704213	A	19971204	NO 1997-4213	19970912 <--
PRAI	US 1995-479436	A	19950607	<--	
	US 1996-650461	A	19960521		
	WO 1996-US9701	W	19960605		
OS	MARPAT 126:144545				
GI					



AB This invention relates to **neurotrophic N-glyoxyl-prolyl esters I**  
 [R1 = straight or branched C1-9 alkyl or alkenyl optionally substituted with C3-8 cycloalkyl; C3 or C5 cycloalkyl, C5-7 cycloalkenyl, or Ar1 substituted with 0-3 halo, OH, NO2, CF3, C1-6 straight or branched alkyl or alkenyl, C1-4 alkoxy, C1-4 alkenyloxy, PhO, PhCH2O, or amino; Ar1 = naphthyl, 2- or 3-indolyl, furyl, 2-thiazolyl, thienyl, pyridyl, Ph; X =

O, S, CH<sub>2</sub>, H<sub>2</sub>; Y = O, NR<sub>2</sub>; R<sub>2</sub> = H, C1-6 alkyl; Z = C2-6 straight of branched alkyl or alkenyl substituted by one or more Ar<sub>1</sub>, C3-8 cycloalkyl, cycloalkyl connected by C1-6 straight or branched alkyl or alkenyl chain, CHR<sub>3</sub>COX<sub>2</sub>R<sub>4</sub>; R<sub>3</sub> = straight or branched C1-8 alkyl optionally substituted with C3-8 cycloalkyl or Ar<sub>1</sub>; X<sub>2</sub> = O, NR<sub>5</sub>; R<sub>5</sub> = H, C1-6 straight or branched alkyl or alkenyl; R<sub>4</sub> = Ph, CH<sub>2</sub>Ph, C1-5 straight or branched alkyl or alkenyl, C1-5 straight or branched alkyl or alkenyl substituted with Ph] or pharmaceutically acceptable salts or hydrates thereof, having an affinity for FKBP-type immunophilins, their prepn. and use as inhibitors of the enzyme activity assocd. with immunophilin proteins, and particularly inhibitors of **peptidyl-prolyl isomerase** or **rotamase** enzyme activity. Thus, coupling of H-L-Pro-OMe with MeO<sub>2</sub>CCOCl, followed by addn. of EtCMe<sub>2</sub>MgCl gave glyoxalylproline ester EtCMe<sub>2</sub>COCO-L-Pro-OMe (II). Sapon. of II followed by esterification with Ph(CH<sub>2</sub>)<sub>3</sub>OH gave a desired title compd., EtCMe<sub>2</sub>COCO-L-Pro-O(CH<sub>2</sub>)<sub>2</sub>Ph. (III). Prepd. inhibitors, including III, were tested for inhibition of **peptidyl-prolyl isomerase**, for **neurite** outgrowth in chick dorsal root ganglion, and in a MPTP model of **Parkinson's** disease in mice.

- ST **FKBP12 immunophilin inhibitor glyoxalylproline ester**  
prepn
- IT Proteins, specific or class  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(**FKBP-12** (**FK 506**-binding protein, 12,000-mol.-wt.); prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)
- IT **Antiparkinsonian agents**  
(prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)
- IT **Immunophilins**  
**Neurotrophic factors**  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)
- IT 186268-50-8P 186268-51-9P 186268-52-0P  
186268-53-1P 186268-54-2P 186268-56-4P  
186268-57-5P 186268-58-6P 186268-63-3P  
186268-64-4P 186268-65-5P 186268-66-6P  
186268-67-7P 186268-68-8P 186452-05-1P  
186452-06-2P 186452-07-3P 186452-08-4P  
186452-09-5P 186452-10-8P 186452-11-9P  
186452-12-0P 186452-13-1P 186452-14-2P  
186452-15-3P 186452-16-4P 186452-17-5P  
186452-18-6P 186452-19-7P 186452-20-0P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)
- IT 186268-55-3 186268-59-7 186268-60-0  
186268-62-2 186268-69-9 186268-71-3  
186268-72-4 186268-73-5 186268-74-6  
186268-75-7 186268-76-8 186452-22-2  
186452-23-3 186452-24-4 186452-25-5  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)
- IT 95076-93-0, **Peptidyl-prolyl isomerase**  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)  
 (prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)

IT 122-97-4, 3-Phenyl-1-propanol 2133-40-6, L-Proline methyl ester hydrochloride 5781-53-3, Methyl oxalyl chloride 28276-08-6, 1,1-Dimethylpropylmagnesium chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)

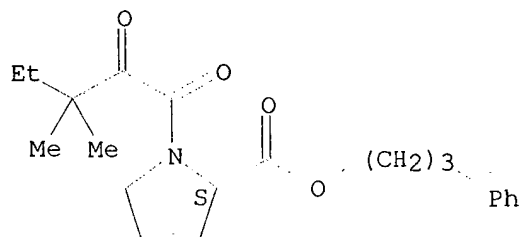
IT 139419-63-9P 186268-77-9P 186268-78-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)

IT 186268-50-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of glyoxalylproline esters as **rotamase** enzyme inhibitors)

RN 186268-50-8 HCAPLUS

CN L-Proline, 1-(3,3-dimethyl-1,2-dioxopentyl)-, 3-phenylpropyl ester (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

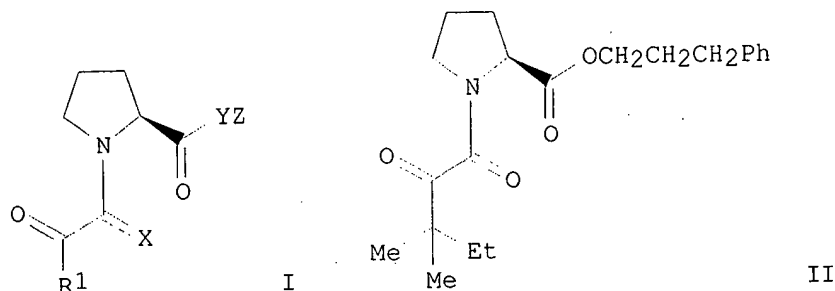


L24 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS  
 AN 1997:113317 HCAPLUS  
 DN 126:118197  
 TI Preparation of proline derivatives as **rotamase** inhibitors  
 IN **Hamilton, Gregory S.**  
 PA Guilford Pharmaceuticals, inc., USA  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07D207-16  
 ICS A61K031-40; A61K038-00; C07D407-04; C07D409-04; C07D417-04;  
 C07K005-078; C12N009-99  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 27

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08333334	A2	19961217	JP 1995-246895	19950831 <--
	US 5614547	A	19970325	US 1995-479436	19950607 <--
	JP 2002371058	A2	20021226	JP 2002-113933	19950831 <--
	CN 1187188	A	19980708	CN 1996-194554	19960605 <--
	ZA 9608984	A	19980625	ZA 1996-8984	19961025 <--
	LT 4484	B	19990325	LT 1998-1	19980106 <--
PRAI	US 1995-479436	A	19950607		<--

JP 1995-246895 A3 19950831 <--  
 OS MARPAT 126:118197  
 GI



- AB The title compds. I [R1 = alkyl, etc.; Z = lipophilic group; X = O, S, etc.; Y = O, NH, etc.] are prepd. I are also **neurotropic** compds. with affinity for **immunophilins**. The title compd. II in vitro showed the Ki value of 42 nM in a test for **rotamase** inhibiting activity.
- ST proline deriv prepn **rotamase** inhibitor **neurotropic**
- IT Proteins, general, biological studies  
 RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)  
 (prepn. of proline derivs. with effect on **immunophilins**)
- IT 186268-50-8P 186268-51-9P 186268-52-0P  
 186268-53-1P 186268-54-2P 186268-55-3P  
 186268-56-4P 186268-57-5P 186268-58-6P  
 186268-59-7P 186268-60-0P 186268-61-1P  
 186268-62-2P 186268-63-3P 186268-64-4P  
 186268-65-5P 186268-66-6P 186268-67-7P  
 186268-68-8P 186268-69-9P 186268-70-2P  
 186268-71-3P 186268-72-4P 186268-73-5P  
 186268-74-6P 186268-75-7P 186268-76-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of proline derivs. as **rotamase** inhibitors)
- IT 95076-93-0, **Rotamase**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of proline derivs. as **rotamase** inhibitors)
- IT 86-81-7, 3,4,5-Trimethoxybenzaldehyde 100-52-7, Benzaldehyde, reactions  
 103-63-9, 2-(Bromoethyl)benzene 122-97-4, 3-Phenyl-1-propanol  
 2133-40-6, L-Proline methyl ester hydrochloride 2605-67-6, Methyl (triphenylphosphoranylidene)acetate 3182-93-2, L-Phenylalanine ethyl ester hydrochloride 5781-53-3, Methyl oxalyl chloride 28276-08-6, 1,1-Dimethylpropylmagnesium chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of proline derivs. as **rotamase** inhibitors)
- IT 1083-30-3P 4407-36-7P 14097-24-6P 20329-96-8P 30273-62-2P  
 40918-96-5P 53560-26-2P 58095-76-4P 68889-69-0P 82475-75-0P  
 139419-63-9P 148775-22-8P 186268-77-9P  
 186268-78-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of proline derivs. as **rotamase** inhibitors)
- IT 186268-50-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

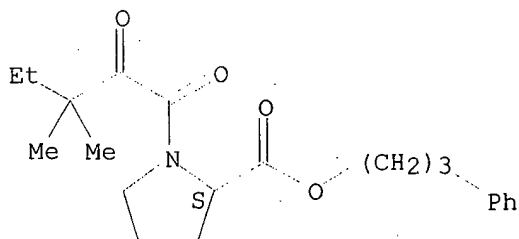


(prepn. of proline derivs. as **rotamase** inhibitors)

RN 186268-50-8 HCAPLUS

CN L-Proline, 1-(3,3-dimethyl-1,2-dioxopentyl)-, 3-phenylpropyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



=> fil reg

FILE 'REGISTRY' ENTERED AT 09:03:25 ON 08 APR 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 7 APR 2003 HIGHEST RN 502131-66-0  
DICTIONARY FILE UPDATES: 7 APR 2003 HIGHEST RN 502131-66-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=> d 126 ide can 1 25 50 75 100 125 150 175 200 225 250 275 300 325 350 275 400 415

L26 ANSWER 1 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 409366-99-0 REGISTRY

CN L-Proline, 1-(3-methyl-1,2-dioxopentyl)- (9CI) (CA INDEX NAME)

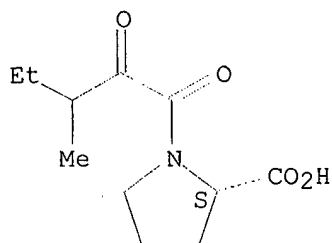
FS STEREOSEARCH

MF C11 H17 N O4

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



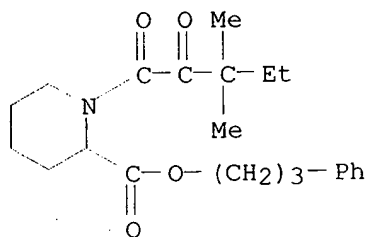
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2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:340999

REFERENCE 2: 136:310178

L26 ANSWER 25 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 409366-72-9 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-(3,3-dimethyl-1,2-dioxopentyl)-,  
3-phenylpropyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C22 H31 N O4  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

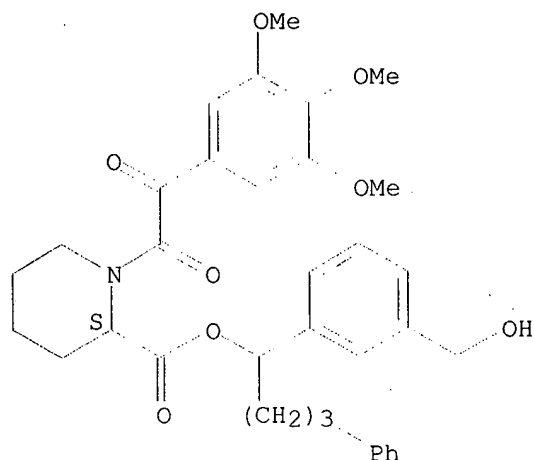
2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:340999

REFERENCE 2: 136:310178

L26 ANSWER 50 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 188618-35-1 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
1-[3-(hydroxymethyl)phenyl]-4-phenylbutyl ester, (2S)- (9CI) (CA INDEX  
NAME)  
FS STEREOSEARCH  
MF C34 H39 N O8  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1962 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 128:205136

REFERENCE 2: 126:343875

REFERENCE 3: 126:272378

L26 ANSWER 75 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 188615-48-7 REGISTRY

CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
1-[3,4-bis(4-pyridinylmethoxy)phenyl]-4-phenylbutyl ester, (2S)- (9CI)  
(CA INDEX NAME)

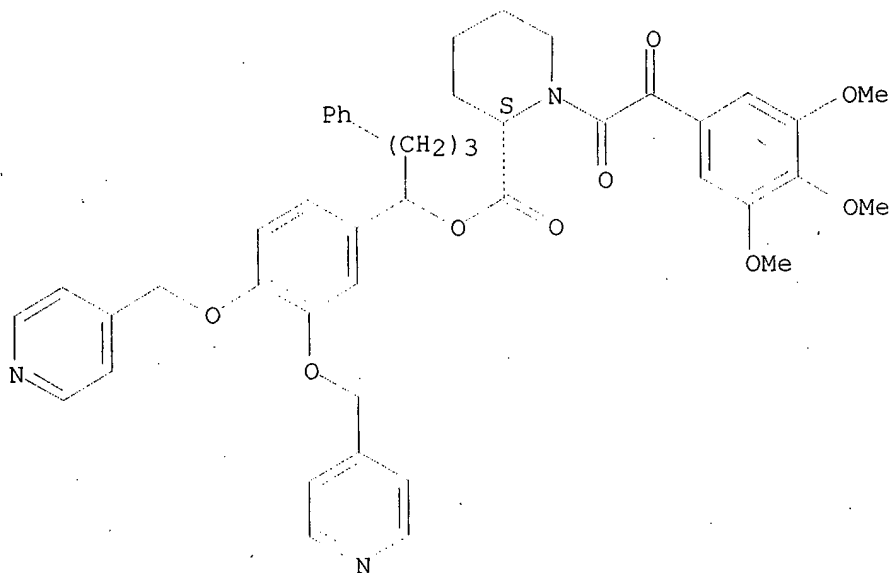
FS STEREOSEARCH

MF C45 H47 N3 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1962 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

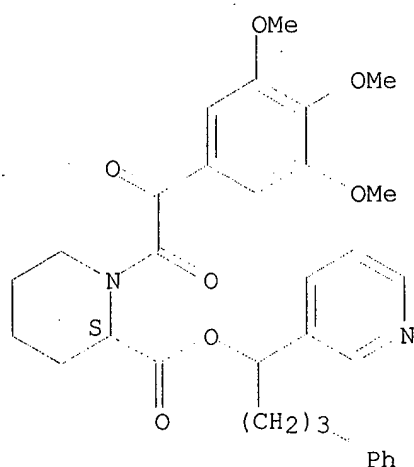
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REFERENCE 2: 126:343875

REFERENCE 3: 126:272378

L26 ANSWER 100 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 188615-23-8 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
4-phenyl-1-(3-pyridinyl)butyl ester, (2S)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C32 H36 N2 O7  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1962 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 128:205136

REFERENCE 2: 126:343875

REFERENCE 3: 126:272378

L26 ANSWER 125 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 188614-98-4 REGISTRY

CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
1-[2-(4-methoxyphenyl)ethyl]-4-phenylbutyl ester, (2S)- (9CI) (CA INDEX  
NAME)

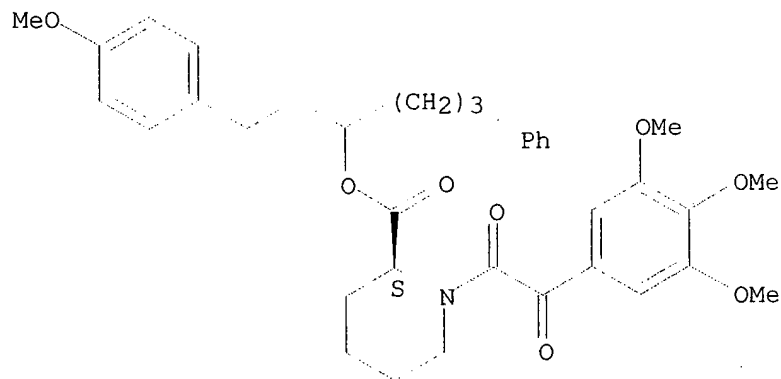
FS STEREOSEARCH

MF C36 H43 N O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1962 TO DATE)

## 3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 128:205136

REFERENCE 2: 126:343875

REFERENCE 3: 126:272378

L26 ANSWER 150 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 186834-85-5 REGISTRY

CN 2-Piperidinecarboxylic acid, 1-(cyclohexyloxoacetyl)-, 3-phenylpropyl ester, (2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Piperidinecarboxylic acid, 1-(cyclohexyloxoacetyl)-, 3-phenylpropyl ester, (S)-

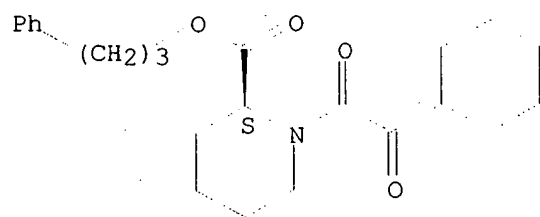
FS STEREOSEARCH

MF C23 H31 N O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

7 REFERENCES IN FILE CA (1962 TO DATE)

7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:11433

REFERENCE 2: 134:168053

REFERENCE 3: 132:237375

REFERENCE 4: 132:175851

REFERENCE 5: 130:262139

REFERENCE 6: 128:70783

REFERENCE 7: 126:152817

L26 ANSWER 175 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 186452-24-4 REGISTRY

CN L-Proline, 1-(4-hydroxy-1,2-dioxobutyl)-, 3-phenylpropyl ester (9CI) (CA INDEX NAME)

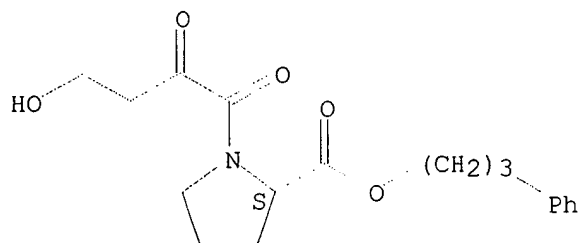
FS STEREOSEARCH

MF C18 H23 N O5

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



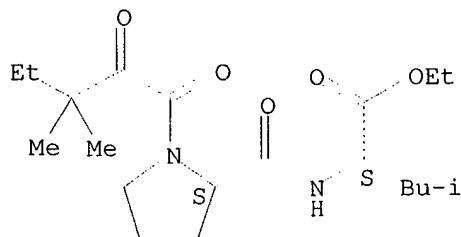
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1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:144545

L26 ANSWER 200 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 186268-72-4 REGISTRY  
CN L-Leucine, 1-(3,3-dimethyl-1,2-dioxopentyl)-L-prolyl-, ethyl ester (9CI)  
(CA INDEX NAME)  
FS STEREOSEARCH  
MF C20 H34 N2 O5  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

7 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:20007

REFERENCE 2: 134:115847

REFERENCE 3: 132:166513

REFERENCE 4: 130:262139

REFERENCE 5: 130:56975

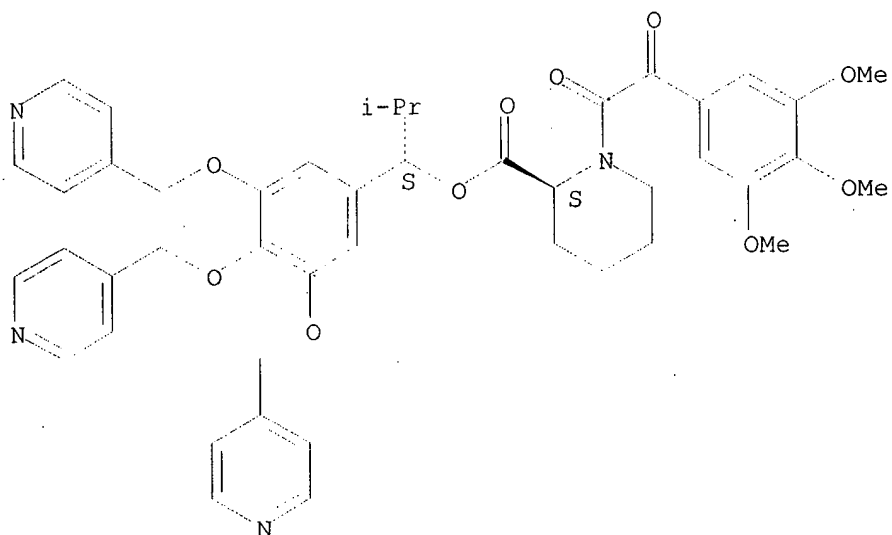
REFERENCE 6: 126:144545

REFERENCE 7: 126:118197

L26 ANSWER 225 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 159998-02-4 REGISTRY  
 CN 2-Piperidinecarboxylic acid, 1-[oxo(3,4,5-trimethoxyphenyl)acetyl]-,  
 2-methyl-1-[3,4,5-tris(4-pyridinylmethoxy)phenyl]propyl ester,  
 [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C45 H48 N4 O10  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1962 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 128:205136  
 REFERENCE 2: 126:343875  
 REFERENCE 3: 126:272378  
 REFERENCE 4: 122:55896

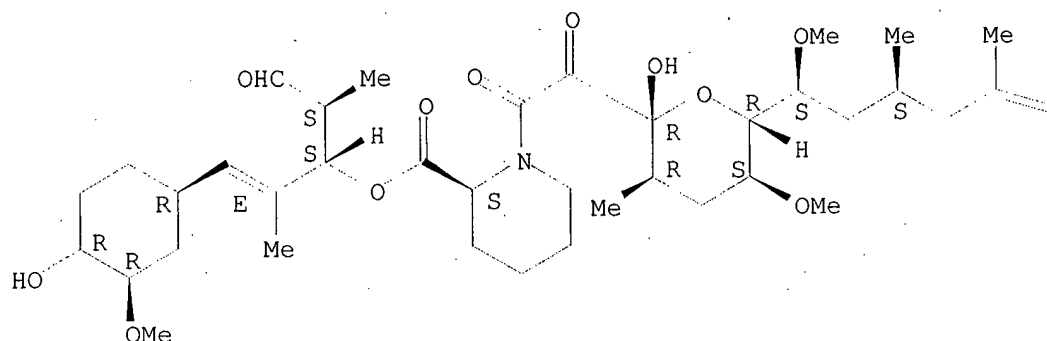
L26 ANSWER 250 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 158631-86-8 REGISTRY  
 CN 2-Piperidinecarboxylic acid, 1-[oxo[tetrahydro-2-hydroxy-5-methoxy-6-[1-methoxy-7-(methoxycarbonyl)-3,5-dimethyl-5-decenyl]-3-methyl-2H-pyran-2-yl]acetyl]-, 3-(4-hydroxy-3-methoxycyclohexyl)-2-methyl-1-(1-methyl-2-oxoethyl)-2-propenyl ester, [2R-[2.alpha.,2[S\*[1S\*(S\*),2E,3(1R\*,3R\*,4R\*)]]],3.alpha.,5.alpha.,6.beta.(1S\*,3S\*,5E,7R\*)]]- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C44 H71 N O13  
 SR CA  
 LC STN Files: CA, CAPLUS

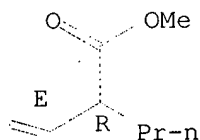
Absolute stereochemistry.  
 Double bond geometry as shown.



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PAGE 1-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:152817

REFERENCE 2: 121:255492

L26 ANSWER 275 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 155255-27-9 REGISTRY

CN 2-Piperidinecarboxylic acid, 1-[[ (2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]tetrahydro-2-hydroxy-3-methyl-2H-pyran-2-yl]oxoacetyl]-, 3-(3,4-dimethoxyphenyl)propyl ester, (2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Piperidinecarboxylic acid, 1-[[6-(2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl)tetrahydro-2-hydroxy-3-methyl-2H-pyran-2-yl]oxoacetyl]-, 3-(3,4-dimethoxyphenyl)propyl ester, [2R-[2.alpha.,2(S\*),3.alpha.,6.beta.(2S\*,3E,5E,7E,9S\*,11R\*)]]-

FS STEREOSEARCH

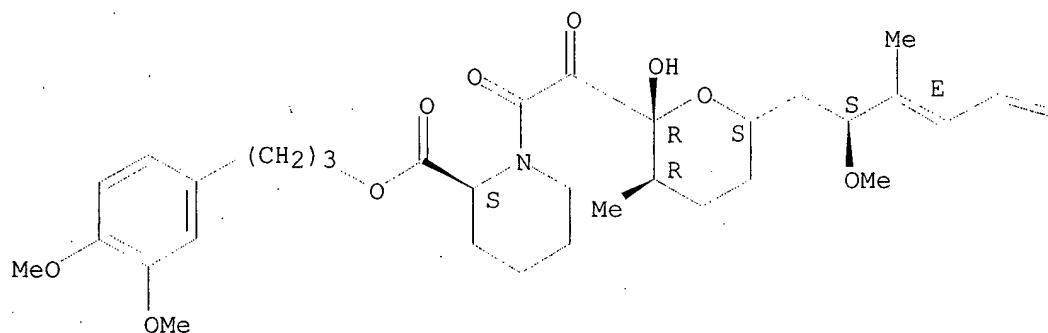
MF C43 H63 N O11

SR CA

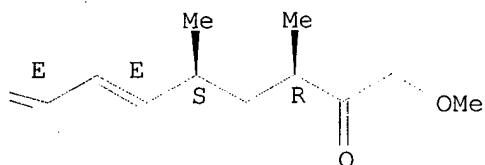
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



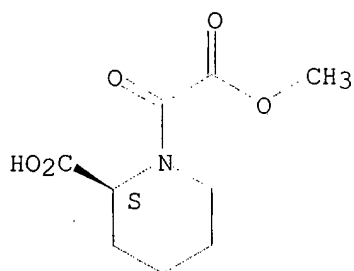
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1962 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:168053  
REFERENCE 2: 132:175851  
REFERENCE 3: 126:152817  
REFERENCE 4: 126:152815  
REFERENCE 5: 120:323019

L26 ANSWER 300 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 141085-14-5 REGISTRY  
CN 1-Piperidineacetic acid, 2-carboxy-.alpha.-oxo-, methyl ester, (S)- (9CI)  
(CA INDEX NAME)  
FS STEREOSEARCH  
MF C9 H13 N O5  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

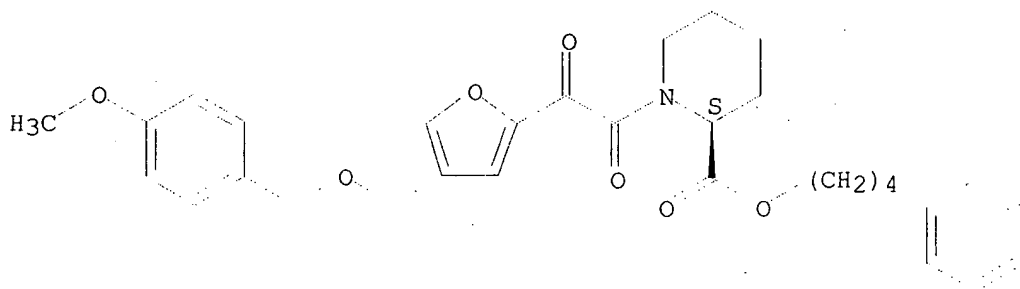
2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:272378

REFERENCE 2: 117:131071

L26 ANSWER 325 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 141084-80-2 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-[[4-[[[(4-methoxyphenyl)methoxy]methyl]-2-furanyl]oxoacetyl]-, 4-phenylbutyl ester, (S)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C31 H35 N O7  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

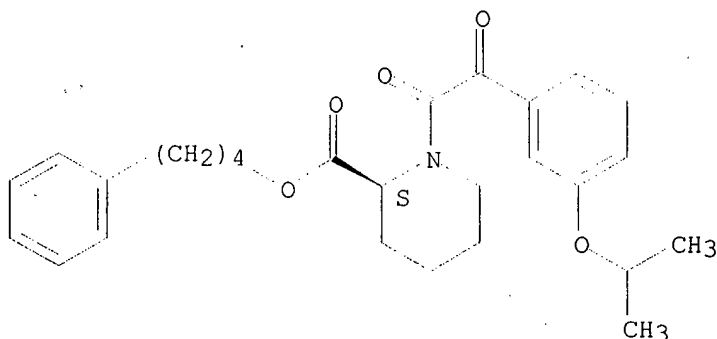
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REFERENCE 2: 117:131071

L26 ANSWER 350 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 141084-54-0 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-[[3-(1-methylethoxy)phenyl]oxoacetyl]-, 4-phenylbutyl ester, (S)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C27 H33 N O5

SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:272378

REFERENCE 2: 117:131071

L26 ANSWER 275 OF 415 REGISTRY COPYRIGHT 2003 ACS

RN 155255-27-9 REGISTRY

CN 2-Piperidinecarboxylic acid, 1-[[[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]tetrahydro-2-hydroxy-3-methyl-2H-pyran-2-yl]oxoacetyl]-, 3-(3,4-dimethoxyphenyl)propyl ester, (2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Piperidinecarboxylic acid, 1-[[[6-(2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl)tetrahydro-2-hydroxy-3-methyl-2H-pyran-2-yl]oxoacetyl]-, 3-(3,4-dimethoxyphenyl)propyl ester, [2R-[2.alpha.,2(S\*),3.alpha.,6.beta.(2S\*,3E,5E,7E,9S\*,11R\*)]]-

FS STEREOSEARCH

MF C43 H63 N O11

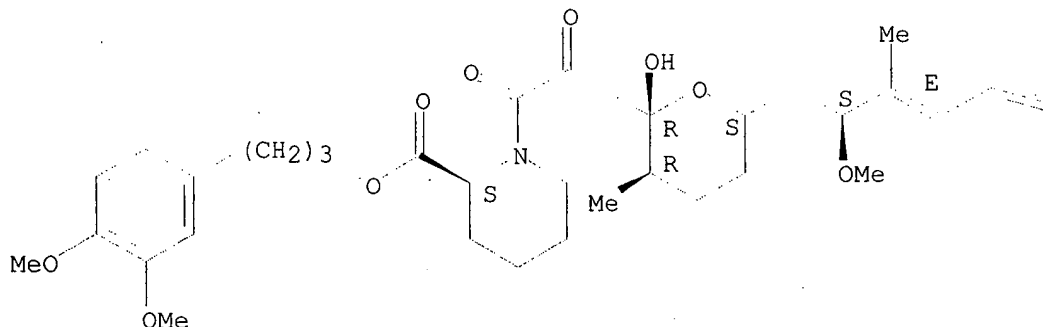
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

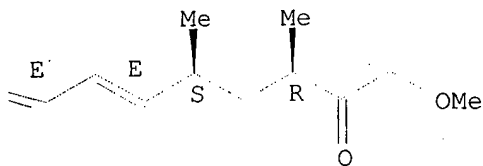
Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1962 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:168053

REFERENCE 2: 132:175851

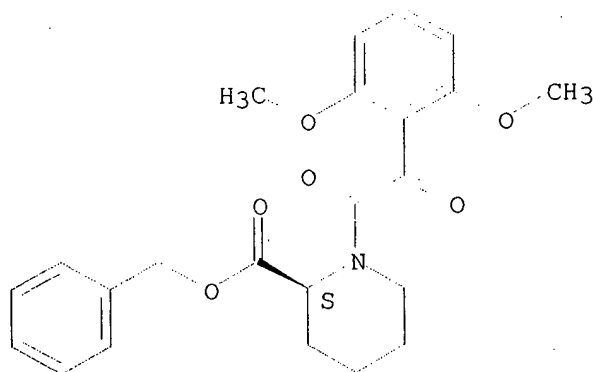
REFERENCE 3: 126:152817

REFERENCE 4: 126:152815

REFERENCE 5: 120:323019

L26 ANSWER 400 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 141083-95-6 REGISTRY  
CN 2-Piperidinecarboxylic acid, 1-[(2,6-dimethoxyphenyl)oxoacetyl]-,  
phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C23 H25 N O6  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

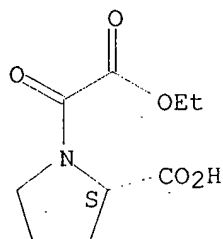
2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:272378

REFERENCE 2: 117:131071

L26 ANSWER 415 OF 415 REGISTRY COPYRIGHT 2003 ACS  
RN 60336-68-7 REGISTRY  
CN 1-Pyrrolidineacetic acid, 2-carboxy-.alpha.-oxo-, .alpha.-ethyl ester,  
(2S)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Pyrrolidineacetic acid, 2-carboxy-.alpha.-oxo-, 1-ethyl ester, (S)-  
FS STEREOSEARCH  
MF C9 H13 N O5  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:340999

REFERENCE 2: 136:310178